

TWENTY-THIRD ACADEMIC YEAR.

ANNUAL REGISTER

OF

DEPARTMENT

OF

ORDNANCE & GUNNERY

THE UNITED STATES NAVAL ACADEMY

AT

ANNAPOLIS, MD.,

FOR

THE ACADEMIC YEAR 1872-'73.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1873.

NAVAL SCHOOL.

FOUNDED OCTOBER 10, 1845.

JAMES K. POLK, *President of the United States.*

GEORGE BANCROFT, *Secretary of the Navy.*

The Naval School was reorganized on the 1st July, 1850, under the title of Naval Academy, as a school of theoretical and practical science. At that time the course of instruction was materially enlarged, and the institution was placed under the supervision of the Chief of the Bureau of Ordnance and Hydrography.

In October, 1851, the present course of instruction of four years was adopted.

On the establishment of the Bureau of Navigation (July 5, 1862), the Academy was placed under its supervision.

March 1, 1867, it was placed under the direct care and supervision of the Secretary of the Navy, and its departmental administrative routine and financial management conducted through the Bureau of Navigation in the Navy Department.

Since March 11, 1869, it has been under the direct care and supervision of the Secretary of the Navy.

BOARD OF VISITORS.

The following-named gentlemen were invited by the Hon. Secretary of the Navy to attend the examination of the cadet-midshipmen of the Naval Academy in May, 1872.

Rear-Admiral BENJAMIN F. SANDS, U. S. N., *President.*

Major-General JOHN C. ROBINSON, U. S. A.

Professor WILLIAM H. C. BARTLETT, U. S. A.

Chief Justice FRANKLIN J. MOSES, of South Carolina.

Commodore C. R. P. RODGERS, U. S. N.

Medical Inspector CHARLES EVERSFIELD, U. S. N.

Chief Engineer EDWIN FITHIAN, U. S. N.

Paymaster EDWIN STEWART, U. S. N.

A. L. CHAPIN, esq., of Wisconsin.

C. C. NORTH, esq., of New York.

NATHANIAL NILES, esq., of New Jersey.

M. D. WICKERSHAM, esq., of Alabama.

THOMAS C. JONES, esq., of Ohio.

EXTRACT FROM THE REGULATIONS OF THE NAVAL ACADEMY.

CHAP. VI, SEC. 9.—The Secretary of the Navy will, when expedient, annually invite not less than seven persons, such as he may judge well qualified, to attend the Academy during the May examination as a Board of Visitors, for the purpose of witnessing the examination of the graduating and other classes, and of examining into the state of the police, discipline, and the general management of the institution; the result of which examination they will report to the Secretary of the Navy.

OFFICERS OF THE NAVAL ACADEMY.

Rear Admiral JOHN L. WORDEN,* *Superintendent.*

Commander HENRY L. HOWISON, *Assistant to Superintendent, &c.*

ACADEMIC STAFF.

Captain SAMUEL P. CARTER*	<i>Commandant of Midshipmen, Head of Department of Seamanship, Gunnery, Naval and Infantry Tactics, &c.</i>
Lieut. Com'r SULLIVAN D. AMES.....	<i>Assistant to Commandant of Midshipmen, &c.</i>
Commander FREDERICK V. MCNAIR*....	<i>Assistant to Commandant of Midshipmen and Senior Instructor in Seamanship, Naval Tactics, Naval Construction, &c.</i>
Lieut. Com'r OLIVER A. BATCHELLER.....	} <i>Assistants to Commandant of Midshipmen and Assistant Instructors in Seamanship, Naval Tactics, Naval Construction, &c.</i>
Lieut. Com'r ROBLEY D. EVANS.....	
Lieut. Com'r CHARLES E. CLARK.....	
Lieut. Com'r HENRY C. WHITE.....	
Ass't Naval Const'r THEO. D. WILSON..	
Commander AUGUSTUS P. COOKE*.....	<i>Assistant to Commandant of Midshipmen and Senior Instructor in Naval Gunnery, Infantry Tactics, and Howitzer Drill.</i>
Lieut. Com'r CHARLES W. TRACY.....	} <i>Assistants to Commandant of Midshipmen and Assistant Instructors in Naval Gunnery, Infantry Tactics, &c.</i>
Lieut. Com'r GEORGE W. COFFIN.....	
Lieut. Com'r NICOLL LUDLOW.....	
Lieutenant JOHN C. SOLEY.....	

MATHEMATICS.

RICHARD S. SMITH,* Professor.....	<i>Head of Department.</i>
WM. W. HENDRICKSON, Lieut. Com'r..	} <i>Assistant Instructors in Mathematics.</i>
FRENCH E. CHADWICK, Lieut. Com'r..	
JOHN C. KENNETT, Lieut. Com'r.....	
JOSEPH E. CRAIG, Lieutenant.....	
WILLARD H. BROWNSON, Lieutenant..	
MORRIS R. S. MACKENZIE, Lieutenant..	

STEAM ENGINERY.

HENRY L. SNYDER,* Chief Engineer.....	<i>Head of Department.</i>
GEORGE W. ROCHE, 1st Ass't Eng'r....	} <i>Assistant Instructors in Steam Enginry, &c.</i>
JOHN C. KAUFER, 2d Ass't Eng'r.....	
CHARLES H. MANNING, 2d Ass't Eng'r.	
FREDERICK SCHOBBER, 2d Ass't Eng'r.	
ROBERT CRAWFORD, 2d Ass't Eng'r...	
GEORGE H. KEARNEY, 2d Ass't Eng'r..	

ASTRONOMY, NAVIGATION, ETC.

SAMUEL D. GREENE,* Lieut. Com'r.....	<i>Head of Department.</i>
ALEX'R H. McCORMICK, Lieut. Com'r..	} <i>Assistant Instructors in Astronomy, Navigation, &c.</i>
CHARLES J. TRAIN, Lieut. Com'r.....	

Those marked thus * are members of the Academic Board.

PHYSICS AND CHEMISTRY.

GEORGE P. RYAN,* Lieut. Com'r.....	<i>Head of Department.</i>
CASPAR F. GOODRICH, Lieut. Com'r...	} <i>Assistant Instructors in Physics and Chemistry, &c.</i>
JOHN M. RICE, Professor.....	
DAVENPORT FISHER, Professor.....	
NATHANIEL M. TERRY, Ass't Prof'r...	

ETHICS AND ENGLISH STUDIES.

ARTHUR R. YATES,* Commander.....	<i>Head of Department.</i>
WILLIAM R. COBB, Chaplain.....	} <i>Assistant Instructors in Ethics and English Studies.</i>
TIMOTHY A. LYONS, Lieutenant.....	
WILLIAM W. FAY, Ass't Professor.....	
CHARLES E. HILL, Ass't Professor.....	
JAMES R. SOLEY, Ass't Professor.....	

FRENCH.

WINFIELD S. SCHLEY,* Lieut. Com'r....	<i>Head of Department.</i>
LUCIEN F. PRUD'HOMME, Professor...	} <i>Assistant Instructors in French.</i>
ALPHONSE V. S. COURCELLE,	
Ass't Professor.....	
EUGENE DOVILLIERS, Ass't Professor.....	
JULES LEROUX, Ass't Professor.....	

SPANISH.

EDWARD A. ROGET,* Professor.....	<i>Head of Department.</i>
PEDRO MONTALDO.....	<i>Assistant Professor of Spanish.</i>

DRAWING.

GOUVERNEUR K. HASWELL,* Lt. Com'r.....	<i>Head of Department.</i>
MARSHAL OLIVER.....	} <i>Assistant Professors of Drawing.</i>
CHARLES F. BLAUVELT.....	

ART OF DEFENSE.

ANTOINE J. CORBESIER.....	<i>Sword Master.</i>
JEAN B. RETZ.....	} <i>Assistant Sword Masters.</i>
GEORGE HEINTZ.....	
MATTHEW STROHM.....	<i>Boxing Master and Gymnast.</i>

OFFICERS NOT ATTACHED TO THE ACADEMIC STAFF.

JAMES A. GREER, Commander, U. S. N....	<i>In charge of Grounds, &c.</i>
PHILIP LANSDALE.....	<i>Medical Inspector U. S. N.</i>
GEORGE R. BRUSH.....	<i>Surgeon U. S. N.</i>
JOSEPH TAYLOR.....	<i>Acting Assistant Surgeon U. S. N.</i>
JAMES D. MURRAY.....	<i>Pay Inspector U. S. N.</i>
JOHN FUREY.....	<i>Paymaster (Storekeeper), in charge of Vessels.</i>
JOHN B. VAN METER.....	<i>Chaplain.</i>
THOMAS KARNEY.....	<i>Professor, in charge of the Library.</i>
JAMES J. GRAFF.....	<i>Assistant Librarian.</i>
RICHARD SWANN.....	<i>Commissary.</i>
RICHARD M. CHASE.....	<i>Secretary of the Naval Academy.</i>
JAMES G. GLYNN.....	<i>First Clerk.</i>
SAMUEL JICKLING.....	<i>Second Clerk.</i>
OWEN D. ROBB.....	<i>Third Clerk.</i>
JOHN SOUTHWICK.....	<i>Carpenter.</i>

OFFICERS ATTACHED TO THE FOLLOWING VESSELS:

Commander HENRY L. HOWISON, U. S. N., in charge of vessels, &c.

GUNNERY-SHIP "SANTEE."

Mates—C. J. Murphy, William G. Smith, Lewis M. Melcher. and Thomas W. Bousall.

Those marked thus * are members of the Academic Board.

PRACTICE-SHIP "DALE" AND SCHOONER "AMERICA."

Boatswain—Thomas Bennett.

AMPHITRITE—(IRON-CLAD.)

Mate—Robert Silver.

PHLOX—(STEAM TENDER.)

Mates—Benjamin G. Perry and Joseph Rodgers.

MARINE BARRACKS.

Captain CLEMENT D. HEBB, U. S. M. C., *Commanding*.

First Lieutenant JAMES M. T. YOUNG, U. S. M. C.

First Lieutenant ERASTUS R. ROBINSON, U. S. M. C.

First Lieutenant MANCIL C. GOODRELL, U. S. M. C.

CADET-MIDSHIPMEN ON PROBATION AT THE NAVAL ACADEMY,

ARRANGED

IN ORDER OF MERIT IN THEIR RESPECTIVE CLASSES

AS DETERMINED AT THE

GENERAL EXAMINATION IN MAY, 1872,

TOGETHER WITH

THE CADET-MIDSHIPMEN ADMITTED IN JUNE AND SEPTEMBER, 1872,
FORMING THE FOURTH CLASS OF 1872-'73.

NOTE.

Cadet-midshipmen whose names are marked thus (*) are the five most distinguished in their respective classes.

Those marked thus (†) were found deficient, but were allowed to continue in their classes on condition of passing at a re-examination.

Those marked thus (‡) were found deficient, and turned back, to re-commence the studies of their respective classes.

Those marked thus (§) were found deficient, and recommended for discharge.

Relative standing of the First or Graduating Class in the several branches of study.—26 members.

UNITED STATES NAVAL ACADEMY.

Order of general merit.	Name.	State.	Date of admission.	Age at date of admission.		Order of merit in—										Demerits for the year.	Sea. service.		
				Years.	Months.	Seamanship.	Practical exercises in seamanship.	Naval construction.	Gunnery.	Fencing.	Marine engines, boilers, &c.	Astronomy and navigation.	Heat and climatology.	Optics and acoustics.	International law.		Spanish.	Months.	Days.*
*1	Freeman, A. T.	New Jersey.	Sept. 24, 1868	17	1	5	9	2	3	21	1	3	1	1	1	1	0	5	21
*2	Southerland, W. H. H.	Naval apprentice.	June 22, 1868	15	11	8	3	1	1	19	3	1	1	1	1	11	32	6	
*3	Roper, J. M.	Missouri.	June 23, 1868	16	7	3	2	5	4	13	8	2	4	12	4	9	52	7	
*4	Fox, C. E.	At large.	June 23, 1868	16	9	9	15	10	7	25	9	6	3	6	7	6	90	5	
*5	James, N. T.	At large.	June 27, 1868	15	11	1	1	12	2	8	4	13	6	5	3	15	90	7	
6	McLean, R. H.	Naval apprentice.	June 22, 1868	17	7	2	4	26	6	8	2	7	14	21	5	2	124	9	
7	Schwenk, M. K.	Colorado Territory	Sept. 22, 1868	16	4	6	7	10	10	12	15	9	23	16	19	8	24	16	
8	Heacock, W. C.	New York.	Sept. 22, 1868	17	6	12	8	3	5	5	5	4	13	9	9	24	88	6	
9	Thompson, C. A.	Louisiana.	Sept. 25, 1868	17	11	14	18	25	9	16	10	5	8	7	20	34	5	16	
10	Medary, J.	At large.	June 25, 1868	15	7	25	20	13	12	16	10	8	7	9	13	18	34	21	
11	Fletcher, R. H.	At large.	June 24, 1868	16	11	7	25	13	8	16	12	5	8	9	18	34	5	16	
12	Fremont, J. C.	At large.	June 24, 1868	17	2	4	7	24	13	9	14	12	12	15	8	22	134	7	
13	Rinehart, B. F.	Pennsylvania.	Sept. 23, 1868	17	8	20	19	8	14	22	18	10	5	13	11	13	68	5	
14	Barber, J. A.	Wisconsin.	June 20, 1867	17	4	17	23	30	23	6	21	14	18	17	14	5	106	11	
15	Galt, R. H.	At large.	June 20, 1868	17	10	16	10	11	15	23	16	15	15	8	10	2	84	7	
16	Miles, C. R.	Utah Territory.	June 27, 1868	16	8	13	5	9	4	21	24	16	25	20	15	21	92	6	
17	Mertz, A.	Wisconsin.	June 26, 1867	16	3	13	14	4	18	14	19	15	17	18	22	7	76	11	
18	Lowry, O. W.	Ohio.	June 23, 1868	16	4	11	11	22	17	4	7	21	24	14	26	17	98	9	
19	Lyeth, C. H.	West Virginia.	June 25, 1868	17	2	10	17	17	19	11	11	17	11	9	23	25	110	7	
20	Hotchkiss, F. S.	New York.	June 28, 1867	14	3	24	21	17	25	16	13	18	8	7	13	14	144	9	
21	Cottman, V. L.	New York.	Sept. 21, 1868	16	7	23	24	23	25	17	26	11	16	22	18	12	124	5	
22	Lasher, O. E.	New York.	Sept. 26, 1868	14	11	21	26	16	24	26	26	19	20	22	17	10	134	21	
23	Waring, H. St.	Naval apprentice.	June 20, 1867	17	5	19	12	15	11	18	25	24	21	28	24	15	128	11	
24	Winlock, J. H.	Kentucky.	Sept. 21, 1868	16	5	15	13	21	20	18	22	20	22	25	26	23	40	5	
25	Sawyer, F. E.	Massachusetts.	Sept. 22, 1868	17	0	22	22	18	22	1	30	26	26	29	16	26	114	5	
26	Baker, D. F.	At large.	June 25, 1868	14	6	26	16	19	26	7	23	25	19	24	25	19	126	7	

(d) Deficient.

Relative standing of the Second Class in the several branches of study.—29 members.

Order of general merit.	Name.	State.	Date of admission.		Age at date of admission.		Order of merit in—										Sea service in practice ships.						
			Years.	Months.	Years.	Months.	Seamanship.	Practical exercises in seamanship.	Naval tactics.	Ship building.	Gunnery.	Infantry tactics.	Fencing.	Astronomy.	Electricity.	Dynamics.	Statics.	French.	Drawing.	Number of demerits.	Months.	Days.	
*1	Schutze, W. H.	Missouri.....	June 21, 1869	15	11	3	4	2	1	1	1	2	1	5	5	2	2	4	60	6	18		
*2	Deering, C. W.	Maine.....	June 21, 1869	16	10	2	2	1	3	3	3	9	3	4	6	4	6	1	70	2	18		
*3	Fowler, G.	Massachusetts.....	June 23, 1869	15	1	2	2	3	4	4	4	2	9	3	2	3	5	3	154	0	18		
*4	Howard, T. B.	At large.	June 24, 1869	14	10	5	6	8	5	6	5	4	19	3	1	1	11	15	0	2	18		
*5	Knight, A. M.	Florida.....	June 30, 1869	14	6	10	10	5	4	4	4	6	14	3	1	4	7	13	19	154	2	18	
*6	Knight, A. A.	At large.	June 28, 1869	16	6	26	20	4	17	17	17	10	3	3	8	2	8	19	1	192	2	18	
*7	Cowles, W. C.	Connecticut.....	Sept. 21, 1869	15	2	11	11	7	16	7	6	9	8	14	9	10	8	4	11	142	2	18	
*8	Badger, C. J.	At large.	June 21, 1869	15	2	1	1	10	2	2	2	23	20	16	6	16	13	12	16	189	2	18	
*9	Young, L.	Kentucky.....	June 21, 1869	17	2	6	5	6	9	10	6	9	8	10	7	10	8	9	4	1	182	2	18
*10	Diehl, S. W. B.	Pennsylvania.....	Sept. 20, 1869	18	0	27	19	14	5	14	13	14	18	6	7	7	6	5	6	22	2	18	
*11	Case, A. L.	At large.	June 23, 1869	15	5	12	7	14	5	13	13	14	18	6	12	22	11	3	3	17	2	18	
*12	Underwood, J. P.	Michigan.....	June 23, 1869	17	7	14	11	15	13	15	13	15	1	20	12	22	11	3	12	140	2	18	
*13	Putnam, C. F.	Illinois.....	June 22, 1869	14	6	25	22	21	8	13	13	15	1	13	14	9	21	6	12	188	2	18	
*14	Underwood, E. B.	At large.	June 24, 1869	15	3	24	24	16	11	15	21	29	9	23	23	20	10	24	142	2	18		
*15	Morrell, H.	New York.....	June 24, 1869	16	2	15	11	20	13	15	13	21	27	13	15	13	16	10	24	142	2	18	
*16	Wilner, F. A.	New York.....	June 23, 1869	17	10	7	14	11	11	15	21	29	9	23	23	20	10	20	8	148	2	18	
*17	Bean, J. W.	North Carolina.....	June 23, 1869	16	9	4	8	18	11	13	12	17	21	22	17	18	18	27	20	120	2	18	
*18	Nicholson, R. F.	North Carolina.....	Sept. 30, 1869	18	0	17	28	18	28	18	25	26	6	22	11	24	17	23	212	2	18		
*19	Winder, W.	New Hampshire.....	Sept. 16, 1869	18	0	28	22	26	26	28	11	13	28	22	10	14	15	26	18	166	2	18	
*20	Schuldt, M. A.	Connecticut.....	June 23, 1869	17	7	20	20	9	26	26	25	7	8	25	19	21	25	13	21	23	2	18	
*21	Robinson, J. M.	At large.	June 23, 1869	17	7	20	20	9	26	27	21	18	12	17	14	12	14	28	22	186	2	18	
*22	Matzmulin, Z.	Empire of Japan.....	Dec. 8, 1869	18	1	18	14	12	21	27	21	28	12	14	24	13	14	28	22	36	2	18	
*23	Lemly, S. C.	North Carolina.....	June 26, 1869	16	3	21	16	17	17	27	21	28	12	14	24	13	14	28	22	136	2	18	
*24	Muse, T. B.	Maryland.....	Sept. 20, 1869	17	0	9	25	13	25	25	28	25	5	27	27	25	26	16	25	36	2	18	
*25	Veeder, T. E. De W.	New York.....	Sept. 24, 1868	14	0	16	27	27	24	24	25	19	24	21	26	17	20	25	18	118	2	18	
*26	Reynolds, A. J.	Indiana.....	Sept. 21, 1869	16	0	22	18	18	18	19	27	18	12	26	20	23	24	14	9	152	2	18	
*27	Halsey, W. F. J.	Louisiana.....	Sept. 21, 1869	16	5	13	16	23	20	20	17	5	16	24	22	23	24	22	27	188	2	18	
*28	Moore, C. B. T. J.	Illinois.....	Sept. 27, 1869	16	1	1	25	23	22	22	23	16	23	24	24	23	23	18	28	166	2	18	
*29	Painsworth, J.	Illinois.....	Sept. 25, 1869	16	0	1	25	23	22	22	23	16	23	24	24	23	23	18	28	166	2	18	
*30	Tyler, F.	Michigan.....	June 20, 1868	16	1																		

(a) Absent sick, not examined.

(b) Transferred from next higher class.

(c) Deficient.

Order of general merit.	Name.	State.	Date of admission.	Age at date of admission.		Order of merit in—										Number of demerits.	Sea service in practice in ships.	
				Years.	Months.	Seamanship.	Gunnery.	Mathematics.	Steam Engineering.	Chemistry.	Rhetoric, history, and composition.	French.	Drawing.					
*1	Albert Wegman.....	New York.....	Sept. 21, 1870.....	16	5	1	6	1	14	8	7	1	33	150	6	26		
*2	Bradley A. Fiske.....	Ohio.....	Sept. 22, 1870.....	16	3	5	4	6	19	3	1	7	5	200	6	26		
*3	George H. Peters.....	Pennsylvania.....	June 23, 1870.....	15	9	11	3	3	4	22	2	4	9	66	6	26		
*4	Frank H. Holmes.....	California.....	June 29, 1870.....	17	9	4	29	3	4	1	10	19	7	138	6	26		
*5	Henry F. Reish.....	Pennsylvania.....	Sept. 27, 1870.....	17	10	6	2	5	12	5	10	5	11	26	6	26		
*6	York Noel.....	Pennsylvania.....	Sept. 20, 1870.....	16	5	7	14	2	15	18	2	17	1	242	6	26		
*7	Lucian Flynn.....	Texas.....	Sept. 22, 1870.....	15	10	21	1	10	47	4	5	3	42	76	6	26		
*8	John W. Stewart.....	Indiana.....	Sept. 28, 1870.....	17	4	10	8	7	28	18	8	15	17	114	6	26		
*9	Hamilton Hutehins.....	New Hampshire.....	June 23, 1870.....	15	6	15	13	8	16	16	14	2	15	148	6	26		
*10	John F. Parker.....	Ohio.....	Sept. 23, 1870.....	17	5	16	13	22	13	6	10	4	19	150	6	26		
*11	John C. Colwell.....	At large.....	Sept. 22, 1870.....	14	1	8	23	18	21	9	6	21	31	158	6	26		
*12	Hosea A. Osgood.....	Massachusetts.....	Sept. 20, 1870.....	17	11	18	10	9	6	23	27	18	28	76	6	26		
*13	Edward C. Fuller.....	Ohio.....	Sept. 27, 1870.....	17	11	2	5	13	7	15	32	32	16	236	6	26		
*14	Warner H. Nostrand.....	New York.....	Sept. 23, 1870.....	17	10	30	24	7	24	34	33	11	22	86	3	8		
*15	John O. Nielson.....	Alabama.....	June 29, 1869.....	16	4	11	24	23	38	21	16	8	20	128	8	18		
*16	William E. Whitfield.....	Arkansas.....	June 21, 1870.....	17	11	9	31	21	9	35	18	11	8	178	6	26		
*17	Frank J. Milligan.....	Tennessee.....	June 29, 1869.....	16	6	14	7	16	5	13	34	29	35	184	8	18		
*18	William R. A. Rooney.....	Pennsylvania.....	Sept. 28, 1870.....	16	8	19	27	19	44	9	19	12	34	96	6	26		
*19	Winslow Alderdice.....	Virginia.....	June 17, 1870.....	16	2	28	33	11	3	32	27	28	27	224	6	26		
*20	Edward J. Dorn.....	Missouri.....	Sept. 21, 1870.....	16	8	25	41	24	33	7	16	6	13	174	6	26		
*21	George E. Hunter.....	Virginia.....	June 21, 1870.....	17	3	39	20	11	40	32	37	9	48	90	6	26		
*22	Bernard O. Scott.....	Alabama.....	June 29, 1870.....	14	5	22	32	26	29	42	3	12	30	120	6	26		
*23	Matthew G. Reynolds.....	Missouri.....	Sept. 21, 1870.....	15	10	17	9	19	32	14	40	32	44	126	6	26		
*24	John M. Bowyer.....	Iowa.....	Sept. 28, 1870.....	17	3	3	44	30	26	26	9	34	25	66	6	26		
*25	Charles W. Haskell.....	Iowa.....	June 23, 1870.....	16	10	37	37	15	46	16	28	27	46	100	6	26		
*26	Clarence E. Fithian.....	Ohio.....	Sept. 22, 1869.....	17	1	30	19	14	1	11	41	41	2	60	8	18		
*27	Lyman Arns.....	Michigan.....	Sept. 24, 1870.....	16	10	31	12	25	18	31	30	26	3	160	6	26		
*28	Edwin L. Reynolds.....	New Jersey.....	June 21, 1870.....	17	3	42	16	27	27	18	25	24	18	130	6	26		
*29	George T. Emmons.....	At large.....	June 4, 1870.....	17	11	26	15	28	22	45	19	40	19	72	6	26		
*30	David Peacock.....	New Jersey.....	Sept. 28, 1869.....	15	4	34	35	16	10	26	42	44	6	116	6	26		
*31	William N. Conet.....	West Virginia.....	June 28, 1869.....	17	5	20	39	31	17	29	38	38	41	234	6	18		
*32	William A. Northcott.....	West Virginia.....	Sept. 24, 1869.....	15	7	24	48	32	48	32	36	23	45	200	9	26		
*33	Frederick W. Damerf.....	Alabama.....	June 23, 1869.....	17	7	33	26	27	43	41	26	19	29	114	9	26		

Third Class.—49 members.—Continued.

Name.	State.	Date of admission.	Age at date of admission.		Order of merit in—							Number of demerits.		Sea service in practice ships.
			Years.	Months.	Seamanship.	Gunnery.	Mathematics.	Steam Engineering.	Chemistry.	Rhetoric, history, and composition.	French.	Drawing.	Months.	Days.
Willie G. Clark.....	At large.....	June 28, 1870.....	16	10	41	49	d41	8	11	19	14	4	0	26
Harry R. Lewis.....	California.....	Sept. 21, 1870.....	15	8	13	21	d36	41	24	31	31	13	238	6
John E. Anderson.....	Ohio.....	Sept. 22, 1869.....	17	5	.....	22	.....	.....	.....	.....	.....	38	72	26
Charles M. McCartney.....	Pennsylvania.....	Sept. 23, 1869.....	15	1	.....	42	.....	.....	48	.....	.....	22	.....	18
Frederick W. Coffin.....	Massachusetts.....	June 15, 1870.....	17	9	.....	11	d34	34	.....	.....	.....	.....	.....	8
Stephen Decatur.....	At large.....	June 6, 1870.....	15	0	29	46	d40	30	21	23	16	43	236	26
Harry M. Hodges.....	Illinois.....	Sept. 20, 1870.....	15	3	44	30	d44	37	42	43	d46	37	235	26
Walter S. Hughes.....	Iowa.....	Sept. 24, 1870.....	17	11	32	18	d33	25	37	35	36	36	132	26
Augustus E. Jardine.....	At large.....	Sept. 21, 1870.....	15	8	45	34	d43	39	42	22	30	32	118	26
Charles Laird.....	Ohio.....	Sept. 28, 1870.....	16	7	35	16	29	42	29	d39	d41	23	40	26
William C. Oliver.....	Tennessee.....	Sept. 20, 1870.....	17	2	38	36	d39	45	39	24	37	24	192	26
Richard H. Townley.....	Nebraska.....	June 20, 1870.....	17	4	23	38	d35	49	26	15	35	39	46	26
Cameron M. Winslow.....	At large.....	Sept. 27, 1870.....	16	1	40	40	d38	36	37	33	33	14	206	26
Eben B. Crocker.....	Massachusetts.....	Sept. 22, 1869.....	15	4	27	47	d45	20	40	29	32	40	246	26
Alfred L. Hall.....	Ohio.....	Sept. 26, 1870.....	16	0	36	43	d45	34	25	d46	d43	d49	242	8
Charles Hull.....	Mississippi.....	Sept. 22, 1870.....	16	5	46	45	d42	31	d47	45	d45	47	220	3

(d) Deficient.

(a) Sick.

Order of general merit.

Relative standing of the Fourth Class in the several branches of study.—83 members.

Order of general merit.	Name.	State.	Date of admission.	Age at date of admission.		Order of merit in—					Number of demerits.	Sea service in practice ships.	
				Years.	Months.	Seamanship.	Mathematics.	Grammar.	Physical geography.	History and com- position.	French.	Months.	Days.
*1	Albon C. Hodgson.....	Georgia.....	June 5, 1871	17	10	1	1	3	2	4	1	3	18
*2	Charles H. Ausden.....	Illinois.....	Sept. 20, 1871	17	11	32	2	5	7	55	15	3	18
*3	Eydelio S. Carter.....	Illinois.....	Sept. 29, 1871	17	4	3	12	16	1	3	13	6	26
*4	John A. Shearnan.....	New York.....	June 7, 1871	16	10	25	3	27	6	16	32	3	18
*5	Allen W. Willis.....	Pennsylvania.....	Sept. 21, 1870	17	6	11	14	9	10	6	4	6	26
*6	Frank F. Fletcher.....	Iowa.....	Sept. 22, 1870	14	10	15	8	17	16	10	24	152	9
*7	William G. Cutler.....	At large.....	Sept. 30, 1871	16	11	33	6	11	17	17	37	3	18
*8	James S. Manley.....	Maine.....	Sept. 29, 1871	17	5	2	11	13	18	19	19	214	6
*9	Nathaniel R. Usher.....	Indiana.....	Sept. 21, 1871	16	5	14	10	6	11	7	51	178	3
10	Clarence A. Corbin.....	Michigan.....	Sept. 26, 1870	17	2	26	5	31	25	14	27	300	6
11	Edgar H. Gaither.....	Kentucky.....	Sept. 30, 1870	17	10	20	7	24	23	22	23	212	6
12	Edward D. Bostick.....	South Carolina.....	Sept. 24, 1870	17	1	5	23	4	5	9	14	126	6
13	Frederick B. Vinton.....	New York.....	Sept. 20, 1871	16	9	37	15	20	34	15	10	108	3
14	Frank S. Collins.....	At large.....	Sept. 25, 1871	17	2	4	24	15	10	11	12	74	3
15	Harry H. Hosley.....	New Hampshire.....	Sept. 22, 1871	15	10	17	17	10	34	47	33	70	3
16	Robert M. Doyle.....	Tennessee.....	Sept. 21, 1870	16	4	8	20	38	39	13	25	156	6
17	Simon L. Lanferty.....	Indiana.....	Sept. 21, 1871	17	10	71	9	66	62	52	16	290	3
18	Moses L. Wood.....	Missouri.....	Sept. 21, 1871	17	1	36	18	60	31	29	20	24	3
19	Beriah Brown.....	Oregon.....	Sept. 28, 1870	14	0	30	19	12	61	40	18	330	6
20	James M. Helu.....	Tennessee.....	Sept. 23, 1871	15	9	64	13	61	27	43	35	156	3
21	Frank E. Beatty.....	Minnesota.....	Sept. 21, 1871	17	9	68	16	21	41	55	26	136	3
22	Ridgely Hunt.....	Louisiana.....	Sept. 20, 1870	16	7	28	35	8	8	20	8	282	6
23	Alexander Sharp.....	District of Columbia.....	June 20, 1870	14	7	7	32	42	15	39	9	16	26
24	Henry J. Hunt.....	At large.....	June 23, 1870	15	2	21	22	26	39	39	43	206	6
25	David Daniels.....	Massachusetts.....	June 5, 1871	15	4	48	33	19	3	12	30	0	3
26	James T. Smith.....	North Carolina.....	June 5, 1871	16	3	45	37	25	7	5	10	6	3
27	Alfred L. Howe.....	Pennsylvania.....	Sept. 28, 1870	16	5	13	38	7	29	30	5	920	6
28	Wilken C. McDowell.....	Pennsylvania.....	June 29, 1870	16	8	16	25	35	55	30	36	249	6
29	George H. Worcester.....	New York.....	Sept. 26, 1871	14	3	55	27	23	37	17	39	262	3
30	Hunter C. White.....	Rhode Island.....	June 11, 1870	16	5	49	29	28	41	23	44	260	6
31	William B. Caperton.....	Tennessee.....	June 5, 1871	15	11	39	30	40	52	57	30	4	3
32	Horace B. Reed.....	Indiana.....	Oct. 5, 1871	17	5	66	21	54	45	64	56	206	3
33	Samuel M. Peacock.....	Kentucky.....	Sept. 20, 1871	17	11	54	28	55	48	44	61	114	3
34	William A. Glassford.....	Missouri.....	Sept. 25, 1871	17	5	34	36	33	24	44	73	0	3

Charles Hayward.....	At large.....	June 5, 1871.....	16.....	2.....	d.....	d80.....	d83.....	d75.....	d80.....	d81.....	236.....	0.....	0.....
Edward W. Hicks.....	Wisconsin.....	Sept. 20, 1871.....	16.....	7.....	d.....	d66.....	58.....	d65.....	d73.....	d68.....	26.....	0.....	0.....
Silvern Hughes.....	Montana Territory.....	June 5, 1871.....	18.....	6.....	40.....	d58.....	62.....	55.....	d57.....	d57.....	150.....	0.....	0.....
Frank Johns.....	Delaware.....	June 5, 1871.....	16.....	2.....	d.....	d77.....	46.....	d68.....	d79.....	d75.....	46.....	0.....	0.....
Frederick A. Lathrop.....	New York.....	June 5, 1871.....	15.....	0.....	6.....	d63.....	63.....	d63.....	d74.....	d58.....	104.....	0.....	0.....
Robert E. Lewis.....	At large.....	Oct. 4, 1871.....	17.....	8.....	d.....	d81.....	d82.....	d81.....	d81.....	d77.....	156.....	0.....	0.....
George K. McGinnigle.....	At large.....	Sept. 25, 1871.....	17.....	3.....	69.....	d55.....	48.....	57.....	34.....	48.....	380.....	0.....	0.....
Frank C. McCoy.....	At large.....	June 5, 1871.....	17.....	2.....	43.....	d74.....	74.....	d67.....	46.....	d72.....	90.....	0.....	0.....
Eben S. Osborne.....	Washington Territory.....	Sept. 29, 1871.....	15.....	4.....	50.....	d64.....	d76.....	53.....	66.....	51.....	16.....	0.....	0.....
Otho H. W. Ragan.....	Maryland.....	June 6, 1871.....	17.....	10.....	61.....	d73.....	49.....	d78.....	d76.....	d71.....	254.....	3.....	8.....
Stephen Y. Seyburn.....	Louisiana.....	June 5, 1871.....	16.....	6.....	47.....	d78.....	79.....	d63.....	57.....	49.....	116.....	0.....	0.....
Joseph S. Strader.....	New York.....	Sept. 22, 1870.....	16.....	11.....	53.....	4.....	2.....	12.....	27.....	3.....	d378.....	3.....	8.....
Cyrus H. Thompson.....	New Mexico.....	Sept. 21, 1871.....	16.....	8.....	d.....	d67.....	73.....	19.....	61.....	d80.....	206.....	0.....	0.....
James V. Turner.....	At large.....	June 20, 1870.....	15.....	9.....	9.....	d65.....	42.....	37.....	48.....	27.....	84.....	3.....	8.....
Edward A. Whipple.....	At large.....	Sept. 22, 1870.....	16.....	6.....	57.....	d47.....	1.....	18.....	1.....	7.....	256.....	3.....	8.....

(a) Absent, sick, not examined.

(d) Deficient.

SUMMARY.

Academic year 1871-'72, concluded June 1, 1872.

First, or graduating class of Cadet-Midshipmen.....	26 members.
Second class of Cadet-Midshipmen.....	29 members.
Third class of Cadet-Midshipmen.....	49 members.
Fourth class of Cadet-Midshipmen.....	83 members.
Class of Cadet-Engineers.....	187
	16 members.
Total.....	293 students.

General merit roll of the Grad

Number.	Name.	Practical seamanship, naval construction, gunnery, naval and infantry tactics. Maxima, 453.						Mathematics.	Steam Engineering.	Astronomy, navigation, and surveying. Maxima, 180.	
		Seamanship.	Practical exercises in seamanship.	Naval construction.	Gunnery.	Infantry tactics.	Fencing.			Astronomy.	Navigation and surveying.
	Maxima.....	177	51	39	141	24	21	123	129	39	141
*1	A. T. Freeman.....	138.39	38.05	35.57	122.50	24.00	10.26	112.43	129.00	36.92	132.05
*2	W. H. H. Southerland.....	152.95	47.76	38.28	141.00	22.08	10.40	117.56	115.87	39.00	141.00
*3	J. M. Roper.....	161.94	49.38	33.75	127.18	14.40	14.94	121.48	94.73	37.96	136.52
*4	C. E. Fox.....	122.16	31.57	27.07	118.09	18.88	8.03	101.46	105.97	32.76	118.62
*5	N. T. James.....	171.93	51.00	28.52	134.38	20.16	14.07	73.93	113.73	31.72	127.29
6	R. H. McLean.....	170.97	46.14	18.76	118.94	23.36	17.47	79.54	115.00	30.68	114.14
7	M. K. Schwenk.....	144.64	41.29	32.32	103.12	21.44	16.90	93.36	87.47	23.44	105.19
8	W. C. Heacock.....	110.11	39.67	34.12	117.33	11.84	17.44	92.11	108.73	27.56	127.57
9	C. A. Thompson.....	93.83	28.33	16.11	102.10	13.76	20.39	97.93	92.87	22.36	109.67
10	J. Medary.....	80.81	25.10	20.86	90.47	15.04	15.08	94.36	92.40	35.88	123.19
11	R. H. Fletcher.....	145.71	18.62	25.89	109.70	17.50	8.33	92.50	91.27	24.01	51.11
12	J. C. Fremont, jr.....	160.89	42.90	19.70	97.62	18.24	17.82	52.21	72.73	21.32	91.76
13	B. F. Rinehart.....	80.22	26.71	22.77	84.41	16.32	9.83	108.08	56.07	33.80	100.71
14	J. A. Barber.....	95.28	21.86	20.64	61.01	15.68	1.55	107.19	67.53	24.44	82.81
15	R. H. Galt.....	94.06	36.43	27.32	85.75	12.48	9.41	75.18	74.60	34.84	47.00
16	C. R. Miles.....	93.97	44.52	27.06	65.09	13.12	13.95	105.92	57.67	26.52	73.86
17	A. Mertz.....	126.32	33.19	33.74	75.61	22.72	16.00	59.97	55.80	19.24	78.33
18	O. W. Lowry.....	128.86	34.81	19.17	70.27	11.20	19.91	64.00	108.80	18.20	55.95
19	C. H. Lyeth.....	119.76	29.95	29.69	72.17	8.00	15.56	79.43	81.13	17.16	63.38
20	F. S. Hotchkiss.....	65.00	23.48	21.11	71.12	8.96	10.47	57.35	72.40	24.44	64.91
21	V. L. Cottman.....	58.48	20.24	17.90	48.92	21.12	13.61	57.70	48.40	16.64	96.24
22	O. E. Lasher.....	74.76	17.00	20.39	63.00	9.28	7.00	61.85	56.33	20.28	60.43
Graduated											
23	H. S. Waring.....	114.57	33.73	20.15	99.71	10.56	18.19	72.25	45.54	30.00	000.00
24	J. H. Winlock.....	91.58	34.27	17.77	66.63	8.64	12.89	30.13	53.45	16.12	58.19
25	F. E. Sawyer.....	78.97	22.67	20.32	60.79	9.92	20.88	56.75	60.47	15.68	000.00
26	D. F. Baker.....	83.90	30.76	19.04	52.72	19.52	13.57	60.58	50.16	14.04	000.00

uating Class of 1872.—22 members.

Physics and chemistry. Maxima, 171.					Ethics and English studies. Maxima, 102.									
Heat and climat- ology.	Optics and accous- tics.	Magnetism and electricity.	Mechanics.	Chemistry.	International law.	History and com- position.	Geography.	Grammar.	Rhetoric.	French.	Spanish.	Drawing.	Conduct.	Aggregate.
45	30	30	54	12	30	30	12	12	18	30	60	39	400	1687
45.00	30.00	30.00	54.00	10.43	29.05	28.59	10.71	11.78	17.27	28.89	58.91	36.53	397.62	1579.94
43.57	28.10	27.60	52.56	12.00	30.00	30.00	12.00	10.70	17.64	19.43	46.04	27.46	365.22	1548.12
40.71	19.52	22.00	51.12	10.79	27.14	27.17	9.52	10.92	16.18	22.61	42.36	19.38	380.35	1492.05
42.14	25.24	29.70	44.64	8.85	24.29	26.99	9.84	10.49	15.82	27.43	52.12	29.75	372.38	1400.89
37.86	26.19	26.80	49.68	6.91	28.10	18.86	6.38	5.08	10.18	18.33	33.88	15.06	343.23	1353.37
26.43	11.91	16.40	29.52	11.52	26.19	21.89	7.14	9.30	13.27	20.76	50.08	27.68	334.59	1341.63
17.86	15.71	18.00	28.08	4.24	13.81	16.63	10.49	7.46	6.73	12.47	43.33	36.61	392.55	1293.13
27.86	21.43	23.60	37.44	8.61	22.38	16.67	8.87	4.86	8.55	15.95	21.69	20.16	362.76	1287.41
36.43	21.43	21.20	42.48	9.09	19.52	23.04	11.78	11.14	11.45	26.29	37.89	34.35	373.63	1277.33
33.56	29.05	18.00	48.24	8.12	12.86	14.80	10.05	9.84	11.09	25.67	57.76	35.77	337.70	1243.61
29.29	16.67	28.40	37.44	10.06	23.33	21.46	10.27	6.92	16.91	24.99	32.82	25.42	341.00	1106.66
33.56	27.14	22.80	33.12	6.67	25.24	17.00	6.81	5.84	9.27	22.02	28.05	19.44	343.25	1200.40
39.29	18.57	18.00	44.64	7.52	20.48	18.63	5.73	5.82	15.45	14.98	39.32	22.05	375.05	1189.47
20.71	14.76	24.40	30.96	10.43	17.62	26.17	5.51	11.35	14.91	22.87	53.43	28.68	359.29	1166.08
25.00	23.33	20.40	26.64	6.42	21.43	14.46	7.46	8.76	14.00	29.82	56.34	18.75	366.55	1136.43
15.00	12.36	25.20	46.80	11.03	16.67	24.89	8.54	5.84	11.82	12.48	25.80	24.44	359.02	1123.07
22.14	13.81	11.60	23.76	7.52	11.91	18.43	4.00	10.05	8.18	20.92	57.87	32.44	365.27	1122.82
16.43	17.62	10.00	25.20	7.88	10.00	13.69	9.19	6.92	6.36	15.21	29.43	36.82	371.48	1107.50
30.71	21.43	19.60	41.04	9.33	10.95	14.10	5.95	4.00	8.91	12.04	24.47	27.44	353.66	1106.66
33.56	24.29	-----	28.44	4.67	18.57	11.54	7.15	6.49	6.00	17.57	31.67	16.51	340.39	966.09
23.57	10.48	10.00	18.00	4.00	14.76	10.36	4.43	5.30	6.00	29.36	34.65	20.07	354.91	945.14
19.29	10.48	13.20	33.12	6.18	15.71	12.25	5.08	6.49	7.45	22.50	37.38	13.00	330.88	917.33
<i>September 23, 1872.</i>														
18.82	13.34	15.60	18.00	11.27	12.38	25.07	8.00	10.27	14.36	17.72	40.89	22.77	341.78	997.97
18.34	00.00	10.80	22.32	4.73	10.64	9.00	5.19	4.00	10.18	10.00	20.00	23.67	386.77	925.31
15.00	00.00	12.40	20.16	5.45	16.19	12.82	5.30	7.79	7.09	17.37	25.68	30.18	356.65	877.93
20.00	00.00	14.40	20.16	5.21	10.32	13.41	8.32	9.30	9.64	14.79	28.25	19.51	342.96	860.56

Alphabetical list of Cadet-Midshipmen, ninety-one in number, admitted in June and September forming the Fourth Class of 1872-'73.

Name.	State.	Date of admission.	Age at date of admission.	
			Y'rs.	Mo's.
Jonathan W. Albertson.....	North Carolina.....	June 5, 1872.....	15	3
William B. Alderscn.....	Idaho Territory.....	Sept. 21, 1872.....	16	8
William H. Allen.....	Illinois.....	Sept. 26, 1872.....	15	10
Augustus C. Almy.....	At large.....	June 6, 1872.....	15	5
Takihiko Azuma.....	Empire of Japan.....	May 13, 1872.....	18	0
Morton S. Bailey.....	Pennsylvania.....	Sept. 20, 1872.....	17	2
William S. Benson.....	Georgia.....	Sept. 21, 1872.....	16	11
Clifford J. Boush.....	Virginia.....	June 5, 1872.....	17	9
Clare Boulton.....	Ohio.....	June 6, 1872.....	15	6
Stimpson J. Brown.....	New York.....	Sept. 16, 1872.....	17	11
Harry N. Butterfield.....	Kansas.....	Sept. 23, 1872.....	17	6
Daniel R. Case.....	At large.....	June 5, 1872.....	15	0
Frank C. Chapman.....	Ohio.....	June 5, 1872.....	17	9
William L. Chipman.....	At large.....	June 12, 1872.....	15	9
John F. Cheek.....	Indiana.....	June 6, 1872.....	16	5
Caleb V. Cherbonnier.....	At large.....	June 6, 1872.....	15	4
De Witt Coffman.....	Virginia.....	June 6, 1872.....	17	6
James H. Conyers.....	South Carolina.....	Sept. 21, 1872.....	16	10
Eugene Cruger.....	New York.....	June 11, 1872.....	15	11
Abraham E. Culver.....	New York.....	June 5, 1872.....	16	2
Robert D. Digges.....	Maryland.....	June 14, 1872.....	14	11
Harry M. Dombaugh.....	Ohio.....	June 6, 1872.....	16	4
George D. Donnelly.....	Arkansas.....	Sept. 23, 1872.....	16	6
Francis H. Duer.....	At large.....	Sept. 24, 1872.....	16	4
Foxhall P. Eldridge.....	At large.....	Sept. 23, 1872.....	16	3
Charles P. Fegan.....	Iowa.....	Sept. 23, 1872.....	16	9
Elstner Fisher.....	Pennsylvania.....	Sept. 21, 1872.....	17	11
Willis S. Flanigan.....	Michigan.....	Sept. 28, 1872.....	16	10
Lewis C. Fletcher.....	Pennsylvania.....	Sept. 24, 1872.....	15	4
George C. Foulk.....	Pennsylvania.....	June 14, 1872.....	15	7
Arthur B. Frenzel.....	Massachusetts.....	June 7, 1872.....	17	7
Henry C. Gearing.....	Pennsylvania.....	June 12, 1872.....	17	3
Joseph B. Gilder.....	At large.....	Sept. 27, 1872.....	14	2
George E. Goodfellow.....	Nevada.....	June 12, 1872.....	16	5
Hermann F. Grabo.....	New Jersey.....	Sept. 20, 1872.....	17	0
Charles H. Gray.....	Pennsylvania.....	Sept. 24, 1872.....	16	4
Frederick D. Gridley.....	New York.....	Sept. 24, 1872.....	17	3
Thomas D. Griffin.....	Virginia.....	Sept. 20, 1872.....	17	9
Alfred L. Hall.....	Ohio.....	Sept. 16, 1872.....	17	11
William E. W. Hall.....	Maryland.....	June 10, 1872.....	16	3
William G. Hannson.....	Pennsylvania.....	Sept. 23, 1872.....	16	1
Horace W. Harrison.....	At large.....	Sept. 24, 1872.....	16	9
Samuel L. Heap.....	Georgia.....	Nov. 4, 1872.....	15	10
Richard Henderson.....	North Carolina.....	Sept. 28, 1872.....	17	1
William C. Henderson.....	At large.....	Sept. 24, 1872.....	17	10
Fletcher Hodges.....	Georgia.....	June 5, 1872.....	16	8
William S. Hogg.....	At large.....	Sept. 24, 1872.....	15	10
Cyrus W. Horton.....	New York.....	June 12, 1872.....	16	11
Grosvenor T. Howard.....	New York.....	Sept. 27, 1872.....	17	8
Henry A. Johnson.....	At large.....	June 5, 1872.....	17	0
David W. Jones.....	Ohio.....	June 8, 1872.....	16	7
Horace T. Jones.....	New York.....	June 6, 1872.....	17	8
Edward M. Katz.....	Wisconsin.....	June 8, 1872.....	16	7
George E. King.....	At large.....	June 5, 1872.....	15	7
Giro Kunitomo.....	Empire of Japan.....	Oct. 7, 1872.....	17	1
Edward D. Leach.....	Indiana.....	June 6, 1872.....	16	9
William Lockett.....	Georgia.....	Sept. 20, 1872.....	16	1
William S. McGinnis.....	Illinois.....	Sept. 26, 1872.....	17	8
Augustus C. Macomb.....	At large.....	Sept. 24, 1872.....	17	11
Walter McLean.....	At large.....	June 6, 1872.....	16	10
John H. McNasser.....	Wyoming Territory.....	June 8, 1872.....	15	0
Stevenson B. Mallory.....	Virginia.....	June 12, 1872.....	16	0
Thomas B. Maynadier.....	At large.....	June 10, 1872.....	16	9
Henry T. Mayo.....	Vermont.....	June 13, 1872.....	15	6
Lyman B. Messinger.....	Massachusetts.....	Sept. 26, 1872.....	16	7
Henry Minett.....	Kentucky.....	June 8, 1872.....	15	9
Alexander R. Mitchell.....	Maryland.....	June 6, 1872.....	15	7
Charles W. Munn.....	New York.....	Sept. 25, 1872.....	15	5
John T. Newton.....	At large.....	Oct. 14, 1872.....	17	0
Calvin C. J. Norris.....	Illinois.....	Sept. 26, 1872.....	14	8
John T. O'Keefe.....	New York.....	Sept. 24, 1872.....	15	8
William B. Osterhout.....	Pennsylvania.....	June 12, 1872.....	17	8
Albert F. Paff.....	Missouri.....	June 8, 1872.....	17	10
Benjamin W. Parker.....	Maine.....	Sept. 20, 1872.....	17	0
Charles F. Pond.....	Connecticut.....	June 12, 1872.....	15	7

Alphabetical list.—Continued.

Name.	State.	Date of admission.	Age at date of admission.	
			Yr's.	Mo's.
Cemplin M. Potts.....	At large.....	June 6, 1872	16	7
John M. Proudfit.....	At large.....	Sept. 24, 1872	17	5
Robert C. Ray.....	At large.....	Oct. 1, 1872	17	11
Edward P. Ricker.....	South Carolina.....	June 12, 1872	17	8
Charles C. Rogers.....	Tennessee.....	June 7, 1872	16	0
Anthony W. Rollins.....	Kentucky.....	June 10, 1872	17	3
William D. Rose.....	At large.....	June 5, 1872	15	11
Andrew S. Rowan.....	West Virginia.....	Sept. 21, 1872	15	4
Villiam R. Rush.....	Louisiana.....	June 6, 1872	14	8
James D. Sheeks.....	Texas.....	Sept. 24, 1872	15	0
Villiam F. Ustick.....	Wisconsin.....	Sept. 23, 1872	17	5
Burns T. Walling.....	Ohio.....	June 5, 1872	17	4
Thomas G. Winch.....	Ohio.....	Sept. 20, 1872	17	10
Charles Winston.....	Alabama.....	Sept. 20, 1872	17	6
William E. Woodworth.....	At large.....	Sept. 30, 1872	15	5
William T. Young.....	Mississippi.....	Sept. 20, 1872	15	0

SUMMARY.

Academic year 1872-'73 began October 1, 1872.

First class of Cadet-Midshipmen.....	29 members.	
Second class of Cadet-Midshipmen.....	34 members.	
Third class of Cadet-Midshipmen.....	49 members.	
Fourth class of Cadet-Midshipmen (appointments of 1872 and transfers from 1871).....	115 members.	
		227
First class of Cadet-Engineers.....	15 members.	
Second class of Cadet-Engineers (appointments of 1872 and transfers from 1871).....	20 members.	
		35
		262 students.

Students from the Empire of Japan are received for instruction under a resolution of the Senate and House Representatives of the United States, approved July 27, 1868.

CALENDAR-1872-'73.

1872.

June 5.—Examination of candidates for admission as cadet-midshipmen began	Wednesday
June 15.—Examination of candidates concluded	Saturday.
July 4.—Holiday	Thursday.
Sept 16.—Examination of candidates for admission as cadet-engineers began	Monday.
Sept. 20.—Examination of candidates for admission as cadet-midshipmen began	Friday.
Sept. 25.—Examination of candidates for admission as cadet-engineers concluded	Wednesday
Sept. 30.—Examination of candidates for admission as cadet-midshipmen concluded	Monday.
Oct. 1.—First term began.....	Tuesday.
Nov. 28.—Thanksgiving; studies, recitations, exercises, and duty suspended	Thursday.
Dec. 25.—Christmas; studies, recitations, exercises, and duty suspended....	Wednesday

1873.

Jan. 1.—New Year; studies, recitations, exercises, and duty suspended....	Wednesday
Jan. 20.—Semi-annual examination begins	Monday.
Jan. 31.—Semi-annual examination and first term ends	Friday.
Feb. 1.—Second term begins.....	Saturday.
Feb. 22.—Holiday	Saturday.
May 19.—Annual examination begins.....	Monday.
June 10.—Annual examination and second term ends.....	Tuesday.

PRACTICE CRUISE—1873.

1872-'73.

June 5.—Examination of candidates for admission as cadet-midshipmen begins	Thursday.
June 14.—Examination of candidates for admission ends.....	Saturday.
Sept. 15.—Examination of candidates for admission as cadet-engineers begins	Monday.
Sept. 20.—Examination of candidates for admission as cadet-midshipmen begins	Saturday.
Sept. 25.—Examination of candidates for admission as cadet-engineers ends.	Thursday.
Sept. 30.—Examination of candidates for admission as cadet-midshipmen ends	Tuesday.
Oct. 1.—First term begins.....	Wednesday

COURSE OF INSTRUCTION.

The studies which shall be pursued and the instruction which shall be given at the Naval Academy are comprised under the following departments and branches:

FIRST DEPARTMENT—PRACTICAL SEAMANSHIP, NAVAL GUNNERY, AND NAVAL AND INFANTRY TACTICS.

First branch—Practical seamanship.—Mode of constructing, docking, and undocking vessels, and of heaving them down for examination and repair; preparations for, and stowage of, ballast, water, provisions, ammunition, sails, and other stores; getting on board and fitting in place masts, yards, rigging, sails, armament, boats, and all other articles of equipment, and arrangements for removing the same when a ship is to be dismantled; berthing the crew, and stationing the ship's company for various duties in working ship; unmooring ship; getting under way; anchoring and mooring; mode of using springs in the different cases to which they may be advantageously applied; keeping a ship from fouling her anchor; clearing hawse; practical use of the lead and of the helm; steering, tacking, wearing; making and shortening sail in different kinds of weather, and in different situations; backing and filling in a tideway; warping; heaving to, and preserving relative position with other vessels when lying-to; chasing to windward and to leeward; closing with other vessels soonest, or avoiding them for the greatest length of time; towing one or more vessels, under all circumstances of weather, when towing is practicable; management of vessels and boats to save men who have fallen overboard, or to rescue persons from vessels at sea, when the sea is rough and dangerous; boarding vessels at sea; examination of ship's papers; landing in a heavy surf; watering and provisioning from an open beach; management of a vessel on her beam ends; also when one or more masts are lost in a gale or in action; and when rudder is lost; or in danger from leaks in a gale at sea, or in imminent danger of soon foundering, or on fire at sea or in port; rules for avoiding collisions; rules of the road, and lights to be carried by vessels, as established by act of Congress.

Second branch—Theory and practice of gunnery—Practical naval gunnery.—The nomenclature of different parts of ship's guns, and of the different carriages which are used in the Navy; and also the several uses, and the names of all articles belonging to or used with guns and carriages in action; component parts of gunpowder and mode of manufacture, and different means by which its strength and other qualities are or may be ascertained; mode of inspecting and proving guns, shot and shells, for their reception from the makers; windage; manner of leading, fusing, and boxing shells, and of unloading them; testing quality and regulating length of fuses; arrangement of ship's magazines, shell and shot rooms; dimensions of cartridge-bags, and mode of making them; weight of charges of powder for different calibers and distances; manner of fitting and using locks, and tangent and dispart sights; necessity for guarding powder, shells, fuses, and all articles of which gunpowder forms a part, from moisture as well as from fire; preparation of a ship for action; stations and duties of men at guns of different calibers, in the different divisions, when preparing for quarters or action; exercise of the guns, and all the duties of those stationed at them in action; modes of ascertaining distances from vessels and other objects at sea; advantages of direct and of ricochet firing under different circumstances; ranges of different projectiles from different calibers and classes of guns; different modes of taking guns on board and sending them from vessels; of mounting and dismounting and transporting them; shifting carriages, breechings, and trucks; securing guns in heavy gales; managing and securing

a gun that has got loose from breeching and tackles ; means of gaining greater safe elevation and depression than carriages ordinarily afford ; injurious effects of double shooting upon the recoil and safety of the gun, and upon the projectiles, as to the accuracy of their direction and the extent of their range for penetration ; arrangements for boarding and repelling boarders ; different calls and signals used in action.

Furthermore, the use of boat and field guns ; their nomenclature, weight, calibers, character, and construction, including the carriages with which they are used for boat and shore service ; preparation of boats for their use ; exercise when used in boats and when on shore ; embarking them in boats from vessels ; equipment for service against merchantmen, boats, or for shore service ; mode of landing and embarking from the shore ; construction and preparation, for immediate use, of the shrapnel and other shells, and of grape, and the regulation of the length of fuses ; adaptation of the different kinds of projectiles for service, according to distance, cover, and the character of the objects of attack ; returning armament and equipments to the vessel, and disposition to be made of them on so doing.

Theory of gunnery.—Review of laws of motion, of projectiles in vacuo and in the atmosphere ; initial, remaining, and final velocities, and the methods of determining their values ; the effects on them by variations of charge, windage, and weight of projectiles ; forces of deviation, arising from the motion of rotation and eccentricity of projectiles, from inclination of the axis of the trunnions, and from other causes ; examination of the several systems or modes of pointing ; tangent sights and determination of their values ; penetration and shock of projectiles, when used against wood, earth, or stone, and with direct and ricochet fire ; recoil, and how affected by preponderance and position of trunnions in relation to axis of the gun.

Third branch—Naval tactics.—The different orders of steaming and sailing fleets, divisions, and squadrons, to be observed for battle and for other purposes ; modes of forming such orders ; of changing from one order to another ; of reforming orders when disturbed by changes of wind ; of interchanging and changing the position of different squadrons or divisions forming parts of a fleet ; advantages of the different prescribed orders for general or special service ; the leading objects to be kept in view in the arrangement of vessels of different strength or force for lines of battle, and in determining upon the manner of making or receiving an attack at sea and at anchor ; examinations of the best accounts of fleet actions ; consideration of the advantages or defects of the plans of attack and defense, and of the execution of the details by the commanders of fleets, divisions, squadrons, and vessels ; mode of communication by signals, embracing the naval code, the army code, and the commercial code.

Fourth branch—Infantry tactics.—Organization and formation of squad, company, and battalion ; facing and wheeling ; marching in line and by flank, and filing ; manual of small arms ; firing, charging ; forming column in mass at half and at full distance, and reforming into line ; extension and closing of column ; column of route ; reducing and increasing front ; passage of defiles ; advancing and retreating by flank, center, and in line ; passage of obstacles ; changes of front ; forming and reducing square ; exercise as skirmishers.

Fifth branch—Naval artillery.—School of the piece and school of the battery.

Sixth branch—The art of defense.—Fencing, small and broad sword ; boxing and swimming.

Seventh branch—Naval construction.—Elements of naval architecture.

SECOND DEPARTMENT—MATHEMATICS.

Algebra.—Fundamental operations ; reduction and solution of equations of the first and second degrees ; reduction and transformation of fractional and surd quantities ; proportions and progressions ; summation of series ; nature and construction of logarithms.

Second branch—Geometry.—Plane and solid.

Third branch—Trigonometry.—Analytical investigation of trigonometrical formulas, and their application to the solution of all the cases in plane and spherical trigonometry ; the construction and use of trigonometrical tables.

Fourth branch—Application of algebra and trigonometry to the mensuration of planes and solids.

Fifth branch—Descriptive geometry.—(The graphic illustration and solution of problems in solid geometry, and the application of this method, particularly to) the projections of the sphere.

Sixth branch—Analytical geometry.—Constructions of algebraic expressions; solution of determinate problems; equations of the right line, plane and conic sections; [discussion of the general equations of the second degree, involving two or three variables; determination of loci; principal problems relating to the cylinder, cone, sphere, and spheroids.]

THIRD DEPARTMENT—STEAM-ENGINEERY.

First branch—Mechanical drawing.—Application of right-line drawing and descriptive geometry to the making of drawings of marine steam machinery after construction.

Second branch—Heat.—Application of heat to steam, and the operation and conservation of marine engines and boilers.

Third branch—Steam.—Physical properties of water; method of generating steam; boiling points of fresh and sea water; measure of steam by atmospheres and mercurial column; steam distinguished from other elastic fluids; pressure, density, and temperature of steam; superheated steam; forms of instruments used to determine temperature and pressure of steam.

Fourth branch—Marine boilers.—General description of marine boilers—their peculiarities; details of construction; advantages and disadvantages of each type; methods of operating; appurtenances and instruments used in connection with marine boilers to determine their efficiency; means used for their proper care and preservation; economy of fuel, and prevention of smoke.

Fifth branch—Marine engines.—General description of marine steam-engines now in use—condensing and non-condensing; elementary parts of the steam-engine; engines used for marine propulsion in the Navy—advantages and disadvantages of each; detail parts of a marine engine—their use and conservation; different types of paddle-wheels and screw-propellers; comparative efficiency of each for naval purposes; method of hoisting and coupling the screw and paddle-wheel—radial and feathering; duties to steam machinery when at sea and in port; repairing damages during and after an action; precautions against fire and spontaneous combustion, bad weather, and probability of an engagement; routine duties of the fire and engine rooms when under steam; coal-bunkers and coaling ship; hints regarding selection of coal on foreign stations.

Sixth branch—Practical exercises.—Practical exercises; operating marine engines and boilers under steam; use of indicator and interpretation of its diagrams; practical observation of the methods of adjustment, and means used to insure the safety and preservation of marine machinery.

Seventh branch—Chemistry.—The practical application of chemistry to the combustion of fuel; corrosion of the metals; analysis of different kinds of fuel, sea-water, boiler scale, lubricating matter, and illuminating oils.

This branch will be taught by lectures and experiment when marine boilers and engines are under discussion.

FOURTH DEPARTMENT—ASTRONOMY, NAVIGATION, AND SURVEYING.

First branch—Astronomy.—Descriptive and physical astronomy; description of the solar system; figure and magnitude of the earth, its motions and consequent changes of seasons; length of day and night; trade and periodical winds; nature and effects of parallax, refraction, dip of the horizon, precession, nutation, and aberration; theory of gravitation; Kepler's laws; explanation of the apparent motions of the sun, moon, planets, and comets, and the principles upon which the determination of their orbits depends; the moon's motions and phases; general theory of the tides; theory of eclipses; general description of the stars, and their distribution in space; measures of time; equation of time.

Second branch—Practical astronomy.—Including the use of astronomical instruments in determining the positions of celestial objects, and terrestrial latitudes and longitudes; optical

principles involved in the construction of astronomical instruments, and in the theory of astronomical refraction. [Calculation of eclipses and occultations.]

Third branch—Navigation.—Sailing by compass; sailing on a great circle; various methods for finding a ship's place at sea; construction and use of charts, including topographical and hydrographic drawing; principles and use of the sextant and circle of reflection, and application of the glass prism to these instruments; the artificial horizon; the azimuth compass; methods of ascertaining the deviation of the compass, produced by local attraction on ship-board; the log, and other instruments for determining a ship's rate of sailing; sounding-instruments; nature and use of the Nautical Almanac; relations of time under different meridians; computation of altitudes and azimuths of celestial objects; finding, by means of amplitudes and azimuths, the variations of the compass; finding the latitude by meridian observations of the sun, moon, planets, and stars; by observations near the meridian, by single altitudes at a given time, and by two altitudes of the same or different objects; finding the longitude by the chronometer, by lunar distances, and by altitudes of the moon; Sumner's method of finding a line of position, and determining the ship's place by two such lines; rating a chronometer on shore by single altitudes, and by equal altitudes, and finding its error at sea by a series of lunar observations. Theory of the various problems of navigation and nautical astronomy, and the application of spherical trigonometry to their solution; [consideration of the true figure of the earth, and the corrections in nautical problems depending upon it.]

Fourth branch—Surveying.—Its principles and practice; measurement of heights and distances; leveling; trigonometrical surveying; hydrographical surveying; direct measurement of a base line; measurement by sound; running lines of soundings; reduction for tides; survey of a harbor or river; fixing the position of shoals, &c.; running survey of a coast; [geodetic corrections in extended surveys;] application of astronomical observations for azimuth, latitude, and longitude.

FIFTH DEPARTMENT—PHYSICS AND CHEMISTRY.

First branch—Mechanics of solids.—Forces and equilibrium; composition and resolution of forces; uniform and varied motion; motion of projectiles in vacuo, and in a resisting medium; center of gravity; equilibrium of a system of bodies; motion of translation of a body or system; motion and equilibrium about an axis; central forces; falling bodies; pendulum and ballistic pendulum; laws of the planetary motions; effect of friction and adhesion, and of stiffness of cordage; mechanical powers; collision of bodies.

Second branch—Mechanics of liquids.—Mechanical properties of fluids; laws of equilibrium and pressure; flotation of bodies; stability and oscillation of floating bodies; specific gravity; [motion of liquids.]

Third branch—Mechanics of aeriform fluids.—Air-pump; weight and pressure of the atmosphere; laws of pressure; density and temperature; barometer; pumps; siphon; motion of elastic fluids.

Fourth branch—Acoustics.—Theory of waves in general; velocity of sound in different media; [molecular displacement; interference of waves;] reflection and echo; speaking and hearing trumpets; [vibrations of strings, of columns of air, and of plates and bells; communication of vibrations.]

Fifth branch—Optics.—General properties of light; catoptrics; dioptrics; chromatics; vision; optical instruments; [physical optics.]

Sixth branch—Electricity.—Static electricity; voltaic electricity; magnetism; electro-magnetism; thermo-electricity.

Seventh branch—Heat.—Conditions of heat; characteristics of heat; theories of heat, ancient and modern; sources of heat, conduction, radiation, and convection; specific heat; sensible and insensible caloric; effects of heat; instruments used for the measurement of heat; thermo-dynamics.

Eighth branch—Chemistry.—(To be taught by familiar lectures and experiments.)

Ninth branch—Meteorology and climatology.

Tenth branch—[*Differential and integral calculus*.—Its principles and its application to maxima and minima, and the simpler problems relating to curves.]

SIXTH DEPARTMENT—ETHICS AND ENGLISH STUDIES.

First branch—*English grammar*.—Orthography; etymology; the analysis and synthesis of sentences; idioms; punctuation.

Second branch—*Descriptive geography*.—Knowledge of the land and water surface; the grand divisions of the earth, and their relative situation; extent and boundaries of the several countries in each of the grand divisions; their natural productions; their commerce, manufactures, and governments; their naval and military strength. The use of globes and maps.

Third branch—*Physical geography*.—The form and motions of the earth; the seasons and climates; the distribution of land and water; mountain ranges; declivities and basins; desert and lake zones; river systems; the currents of the ocean; geographical distribution of plants and animals; influence of physical causes on man.

Fourth branch—*Outlines of history*.—Ancient and modern; in the latter, mainly that of America, England, France, and Spain, during the last three centuries; written biographical and historical exercises.

Fifth branch—*Rhetoric*.—Verbal criticism; the principles of taste, and their application; original compositions, embracing official reports.

Sixth branch—*Ethics*.—The ground of moral obligation; our relations to God, and consequent duties; personal duties; the chief relations of men to each other in society, and the duties thence arising. (To be taught by means of familiar lectures, given by the chaplain.)

Seventh branch—*Political science*.—A review of the origin and structure of the Federal Government of the United States of America, its constitutional law; the acts of Congress for the better government of the Navy; the law of nations generally; the rights and duties of nations in peace and in war.

SEVENTH DEPARTMENT—FRENCH.

Reading and writing the French language correctly; exercises in speaking it.

EIGHTH DEPARTMENT—SPANISH.

Reading and writing the Spanish language correctly; exercises in speaking it.

NINTH DEPARTMENT—DRAWING.

Right-line drawing, sketching, and perspective; topographical and chart drawing.

The foregoing studies shall be distributed into four annual courses, and the *câdet*-midshipmen shall be arranged in four classes, each class pursuing one of these courses.

PROGRAMME OF STUDIES FOR CADET-MIDSHIPMEN.

Three recitations daily, except Saturday, marked (1) (2) (3). (1) Between 8½ a. m. and 10½ a. m., except Monday, when it will be between 9 a. m. and 11 a. m. (2) Between 10½ a. m. and 12½ p. m., except Monday, when it will be between 11 a. m. and 12.55 p. m. (3) Between 2 p. m. and 4 p. m. Practical exercises after the third period every day, except Saturday. Saturday, practical exercises after first period.

First term, 1871: October 1 to February 1.

Department.	Recitations.	Subjects.
<i>Fourth Class—First year.</i>		
Seamanship.....	[W. Th.] (3).....	Luce's Seamanship and Practical Exercises.
Mathematics.....	[M. T. W. Th. F.] (2).....	Geometry.
Ethics and English Studies.....	[M. T. W. Th. F.] (1) [T. F.] (3).....	Grammar and Physical Geography.
French.....	[M.] (3) [S.] (1).....	Vannier's Method.
<i>Third Class—Second year.</i>		
Seamanship.....	[T. F.] (2).....	Luce's Seamanship and Practical Exercises.
Gunnery.....	[M. W.] (2).....	Ordnance Instructions.
Mathematics.....	[M. T. W. Th. F.] (1).....	Trigonometry.
Steam Engineering.....	[Th.] (3).....	Drawing (Instrumental).
Ethics and English Studies.....	[M. W.] (3) [S.] (1).....	History of the United States and Composition.
French.....	[T. F.] (3) [Th.] (2).....	Fasquelle's Grammar.
<i>Second Class—Third year.</i>		
Seamanship.....	[M. F.] (3) [W.] (1).....	Luce's Seamanship [M. and W.] Shipbuilding [F.] Infantry Tactics. Calculus and Mechanics [M. T. Th. F.] (1) Magnetism and Electricity [T. Th.] (2) [S.] (1) Sadler's Petit Cours and Fasquelle's Reader. Sketching.
Gunnery.....	[F.] (2).....	
Natural and Exp. Philosophy.....	[M. T. Th. F. S.] (1) [T. Th.] (2).....	
French.....	[M. W.] (2) [Th.] (3).....	
Drawing.....	[T. W.] (3).....	
<i>First Class—Fourth year.</i>		
Gunnery.....	[M. T. W. Th.] (3).....	Ordnance and Armor.
Steam Engineering.....	[T. Th.] (2) [S.] (1).....	Marine Steam Engineering and Practical Exercises.
Astronomy, Navigation, and Surveying.....	[M. T. Th. F.] (1).....	Navigation and Nautical Ast'y. Practical Exercises. Heat and Climatology. Rogé's Olendorff, French and Spanish.
Natural and Exp. Philosophy.....	[M. W. F.] (2).....	
Spanish.....	[W.] (1) [F.] (3).....	

Second term, 1872: February 1 to June 1.

<i>Fourth Class—First year.</i>		
Seamanship.....	[M.] (3) [S.] (1).....	Luce's Seamanship and Practical Exercises.
Mathematics.....	[M. T. W. Th. F.] (2).....	Algebra and Geometry.
Ethics and English Studies.....	[M. T. W. Th. F.] (1).....	History and Composition.
French.....	[T. W. Th. F.] (3).....	Grammar and Exercises.
<i>Third Class—Second year.</i>		
Seamanship.....	[T. F.] (2).....	Luce's Seamanship and Practical Exercises.
Mathematics.....	[M. T. W. Th. F.] (1).....	Analytical Geometry. Descriptive Geometry.
Drawing.....	[W. F.] (3).....	
Physics and Chemistry.....	[M. W.] (2) [S.] (1).....	Sketching.
Ethics and English Studies.....	[T. Th.] (3).....	Chemistry.
French.....	[M.] (3) [Th.] (3).....	Rhetoric and Composition.
		Fasquelle's Grammar and Sadler.
<i>Second Class—Third year.</i>		
Seamanship.....	[W.] (1) [F.] (3).....	Luce's Seamanship [W.] Naval Tactics (Ward and Parker) [F.]
Ordnance and Gunnery.....	[M. W.] (3).....	
Physics and Chemistry.....	[M. T. Th. F.] (1).....	Gunnery.
Astronomy and Navigation.....	[M. W. Th.] (2).....	Dynamics and Calculus.
French.....	[T. F.] (2) [S.] (1).....	Descriptive and Nautical Ast'y.
Drawing.....	[T. Th.] (3).....	Sadler and Nautical Phrase Book.
		Topographical.

Second term, 1872: February 1 to June 1.—Continued.

Department.	Recitations.	Subjects.
<i>First Class—Fourth year.</i>		
Seamanship... ..	[M.] (1) [W. Th.] (2) [T.] (3).....	{ Luce's Seamanship [T. Th.] Naval Construction [M. W.] King's Marine Steam Engine, Propeller, &c. Practical Exercises. Nautical Astronomy and Navi- gation. Practical Exercises and Exam- ples. Acoustics and Optics. International Law—Constitution of the United States. Ollendorff's Method (French and Spanish).
Steam Enginery.....	[M.] (2) [W. S.] (1).....	
Astronomy Nav. and Surveying..	[T. Th. F.] (1).....	
Physics and Chemistry	[T. F.] (2).....	
Ethics and English Studies.....	[W. F.] (3).....	
Spanish.....	[M. Th.] (3).....	

LETTER TO CANDIDATES.

NAVY DEPARTMENT,
Washington, January 31, 1863.

Application having been made on your behalf for admission to the United States Naval Academy, you will find in the inclosed permit a statement of the requisite qualifications for admission. Should you, on examination, show a fair proficiency in the branches of knowledge there indicated, and comply with the other conditions, you will be received as a midshipman, and become thenceforward an officer of the Navy of the United States. So great is the importance of this step, not merely to yourself but to the public, that the Secretary deems it a fit occasion to call your attention to the obligations which you assume in this new and honorable character.

You will bear in mind, then, that the Government, in receiving you into its Naval Academy, undertakes to furnish you, at the public expense, with a superior scientific and practical education, under the instruction of thoroughly accomplished teachers. This is a privilege which, in the nature of things, can fall to the lot of but a small portion of the youth of the country, and it is one which, in all probability, many of the pupils of the Academy would otherwise not enjoy. It is, however, but the smallest part of what the Government does for you. In admitting you to the Academy it secures to you an adequate provision, in a most honorable calling, for your future support, of which, while you live, nothing but incapacity or misconduct can deprive you. This great benefit, however, is not conferred on the pupils of the Naval Academy from any favoritism to them, but from great public motives. In the present state of the world the safety and honor of a country require that a portion of the young men should be regularly educated and trained in the science and art of war. This is necessary in both arms of the service, but peculiarly so in the Navy. There are several instances in the land service of brilliant success on the part of chieftains who first entered the field in middle life; but the instances are much less frequent of distinguished naval commanders who did not commence their preparation in youth. This is the important reason for which the country has called the pupils of the Academy from their homes and conferred upon them the above-mentioned enviable privileges.

You must, therefore, bear constantly in mind that these privileges, great as they are, are trusts for which the country will hold you strictly accountable. Henceforward your time is not your own; it belongs to the public. The Government takes you into its service in your youth because your preparation for the active duties of your career cannot be safely delayed to more advanced years. So much scientific, mechanical, and practical knowledge must be acquired, that nothing sort of diligent application, commenced in early life, will enable the faithful officer to obtain a thorough mastery of his profession. It is a great error to suppose that nothing is necessary to make a good officer but the physical courage required in time of action, and which is, to some extent, a natural gift. This, of course, is indispensable; but it is one only of the qualifications for the service. Beginning at the foundation, the thoroughbred naval officer must know something of ship-building, alike in wood and iron; not that he needs the knowledge of the naval architect, but he must be able to judge of the work both of construction and repair, and be competent to provide a prompt remedy for disasters at sea. He must be intimately acquainted with the rig, equipment, and handling of his vessel; must understand the navigation of the ocean by sails and steam; be familiar with the great currents of the sea and of the atmosphere; and have an accurate knowledge of the principal ports and harbors in every quarter of the globe. He must be thoroughly versed in every variety of naval armament, ordnance, and ammunition—a field of knowledge of which the limits have been greatly enlarged of late years, and in which still further advances are in rapid progress. Thus prepared in the lower branches of his profession, he must, by experience gradually acquired on a small scale, and by diligent study of the lives and exploits of illus-

trious commanders, learn, so far as it can be learned in this way, not only how single ships are fought, but how great fleets are maneuvered and led to glorious victories.

To attain these great ends, abstract science and mechanical art furnish but the lower instruments. Moral influences must lend their all-powerful aid. Beginning with the arduous task of self-government, of which the habit must be acquired by cheerful conformity to the discipline of the Academy and the subordination of the service, the accomplished officer must learn the great art of governing others over whom he may be placed in the public service. He must learn the lesson of command in the school of obedience. A fractious and intractable pupil, if he succeed in obtaining promotion, will be nearly sure to make an arbitrary and tyrannical officer. Treated, as you will be, with parental kindness at the Academy, nothing that you will learn there is more important than the art of gaining the confidence and winning the affection of those whom you may hereafter command. The officer who acquires the good will of his men by kind words and deeds will be far more successful in enforcing the necessarily strict discipline of a man-of-war than one who deals in rough language, oaths, and harsh treatment. It is related of a distinguished British naval officer (Lord Collingwood), that the most refractory seamen were transferred to his vessel from all the other ships in the fleet, not because his discipline was the most severe, but because it was at once the most gentle and the most efficacious.

The duties thus enumerated, numerous and important as they are, are not all that devolve on the naval officer. In addition to the skill appropriately belonging to his profession, it is necessary that his manners should be marked with courtesy and refinement, and that his mind should be amply stored with useful knowledge. In the service of a great naval power, he will, on foreign stations, often be called upon to appear as the representative of his Government. He will be brought into contact with the naval commanders of other countries, and sometimes with personages of the highest rank and consequence. On these occasions the good name and consideration of his country are, to some extent, in his hands. Still more, he will sometimes be obliged, with little opportunity for deliberation, and no time to consult his Government, to decide important questions of the law of nations. It is evident that the most momentous consequences may flow from the degree of intelligence with which he may act on such occasions.

These are the reasons for which the country calls a select number of her children, in the morning of their days, to enter her naval service. The common parent of all, she bestows upon them these enviable advantages in order to fit them for the various and arduous duties to which I have alluded. The young officer, accordingly, when he enters the Naval Academy, becomes the pledged servant of the country—of the whole country—bound by the strongest ties of duty and gratitude to serve her with fidelity and zeal. He is henceforward an officer, not of the State in which he was born or in which he resides, but of the United States of America. He may have been born at the East or the West, the North or the South, but his allegiance is due to the Union—to the Government which has educated him, which has commissioned him, and which he has solemnly sworn to defend. Wheresoever the voice of duty or lawful authority may call him, there he will cheerfully hasten to sustain the honor of his country's flag, to protect her lawful commerce, to combat her enemies. It may be his duty to risk, perhaps to sacrifice, his life, like the naval heroes who shed undying glory on the American Navy in the last generation, in open war against a legitimate foe; or to follow a piratical sea-rover, meanly fitted out by foreign cupidity for the work of devastation and plunder; or to pass weary days and nights in watching the ports of rebels in arms against their country; or to launch the terrific thunders of his broadsides on their fortresses: whatever the duty may be, it will be diligently, zealously, and heroically performed.

The character of the struggle in which the Government and loyal people of the country have been engaged gives a peculiar significance to these considerations; nor can the Secretary forbear to allude to the all-important services which were rendered by the Navy during that contest. The outbreak of the rebellion found this arm of the service on a peace establishment, its squadrons widely dispersed; some of its most important home stations situated in the seceding States, and soon seized—too often with treacherous connivance—and passed into rebel hands. Enfeebled as the Navy was by these causes, and still further by the necessary

sacrifice of vessels to prevent them from falling into the hands of the enemy ; compelled to call into the service with urgent haste a numerous fleet of vessels not constructed for warlike purposes ; above all, obliged, without previous preparation, to inaugurate a novel system of armature—the Navy performed its herculean labors with an energy and success that reflect the highest credit on all belonging to it, officers and men, and which the Secretary takes great pleasure in holding up to the emulation of the young men at the Academy, who will hereafter be called upon to sustain the well-earned reputation of this branch of the service.

Especially let the young men now entering the Navy impress upon their minds, as the great lesson of the day, that of all the duties of a faithful officer, the first and foremost is that of fidelity to his flag—the sacred symbol of the Government which has trained him to its defense and confided its honor to his keeping. Let him, as he sets his foot on the threshold of the Academy, form the firm resolve, living or dying, to be faithful to that great trust. Let him, in advance, steel his mind against the wretched sophistry under the influence of which a portion of the naval officers in the rebellious States (but by no means all of them), deceived and misled, against their own better impulses, by the craft of politicians, have allowed themselves to raise a parricidal arm against their country, employing the fruits of the education received at its expense, and of the experience gained in its service, in aid of an unprovoked and cruel rebellion. Before he enters on actual service, the young officer takes a solemn oath “to support, protect, and defend the Constitution of the United States against all enemies, whether domestic or foreign ;” and the Secretary would earnestly impress upon the young men, on their admission to the Naval Academy, that no human power can absolve them from that obligation. The madness of the hour may cause a misguided man to forget that he has called his God so to deal with him as he shall keep or break his oath, but the time will come, even in this world, when the sin of perjury will lie heavy on his soul.

But the Secretary is confident that no one of the young gentlemen now entering the Naval Academy, or already here, will ever incur the foul reproach of betraying the flag of the Union. They will uphold it on every sea and on every shore, by every effort and at every hazard, in the storm of the elements or the storm of battle. They will live for it and fight for it ; if need be, they will bleed for it. While it floats they will stand by it, and, if it must sink, they will go down with it, rather than disgrace or betray it.

The Secretary forbears to enter into any particular statements as to the studies, exercises, and discipline of the Academy. The intelligent officer charged with the superintendence of the institution, and who possesses the entire confidence of the Department, aided by his able and efficient associates, will from time to time call your attention to the various details of duty ; and the Secretary confidently trusts that, under their guidance, you will, by the faithful improvement of your great opportunities, prepare yourself for eminent usefulness and high honor in the service of the country.

GIDEON WELLES.

Secretary of the Navy.

REGULATIONS

GOVERNING

THE ADMISSION OF CANDIDATES INTO THE NAVAL ACADEMY.

I. The number of cadet-midshipmen allowed at the Academy is one for every member and delegate of the House of Representatives, one for the District of Columbia, ten appointed annually at large.

II. The nomination of candidates for admission from the District of Columbia, and at large, is made by the President. The nomination of a candidate from any congressional district or Territory is made on the recommendation of the member or delegate, from actual residents of his district or Territory.

III. Each year, as soon after the 5th of March as possible, members and delegates will be notified, in writing, of vacancies that may exist in their districts. If such members or delegates neglect to recommend candidates by the 1st of July in that year, the Secretary of the Navy is required by law to fill the vacancies existing in districts actually represented in Congress.

IV. The nomination of candidates is made annually, between the 5th of March and the 1st of July. Candidates who are nominated in time to enable them to reach the Academy between the 5th and 15th of June, will receive permission to present themselves at that time to the Superintendent of the Naval Academy for examination as to their qualifications for admission. Those who are nominated prior to July 1st, but not in time to attend the June examination, will be examined between the 20th and 30th of September following; and should any candidate fail to report, or be found physically or mentally disqualified for admission in June, the member or delegate from whose district he was nominated will be notified to recommend another candidate, who shall be examined between the 20th and 30th of September following.

V. No candidate will be admitted into the Naval Academy unless he shall have passed a satisfactory examination before the Academic Board, and is found (in the opinion of a medical board, to be composed of the surgeon of the Naval Academy and two other medical officers designated by the Secretary of the Navy) in all respects physically sound, well formed, and of robust constitution, and qualified to endure the arduous labors of an officer in the Navy.

VI. Candidates for appointment as cadet-midshipmen must be between fourteen and eighteen years of age when examined for admission. All candidates for admission will be required to certify *on honor* to their precise age, to the Academic Board, previous to examination, and none will be examined who are over or under the prescribed age. They must be of good moral character, satisfactory testimonials of which, from persons of good repute in the neighborhood of their respective residences, must be presented; and testimonials from clergymen, instructors in colleges and high schools, will have special weight. They must also pass a satisfactory examination before the Academic Board in reading, writing, spelling, arithmetic, geography, and English grammar, viz: in *reading*, they must read clearly and intelligibly from any English narrative work, as, for example, Bancroft's History of the United States; in *writing* and *spelling*, they must write from dictation, in a legible hand, and spell with correctness both orally and in writing; in *arithmetic*, they will be examined in numeration and the addition, subtraction, multiplication, and division of whole numbers and vulgar and decimal fractions, and in proportion, or the rule of three, and show a good knowledge of the subject. It is desirable that the board should ascertain the aptitude of a candidate in this branch of study, which if good should count in his favor in case of a slight deficiency in other branches. In *geography*, candidates will be examined as to the grand divisions—the continents, oceans, and seas, the chief mountains and rivers, and the bound-

aries, and population of the chief nations, their governments, capitals, and chief cities; *English grammar*, they will be examined as to the parts of speech, the rules connected therewith, and the elementary construction of sentences, and will be required to write such original paragraphs as will show that they have a proper knowledge of the subject.

The board will judge whether the proficiency of the candidate in these branches is sufficient to qualify him to enter upon the studies of the Academy.

VII. Any one of the following conditions will be sufficient to reject a candidate:

Feeble constitution; permanently impaired general health; decided cachexia; all chronic diseases, or results of injuries that would permanently impair efficiency, viz:

1. Infectious disorders.
2. Weak or disordered intellect.
3. Unnatural curvature of spine.
4. Epilepsy, or other convulsion, within five years.
5. Impaired vision, or chronic disease of the organs of vision.
6. Great permanent hardness of hearing, or chronic disease of the ears.
7. Loss or decay of teeth to such an extent as to interfere with digestion and impair health.

8. Impediment of speech to such an extent as to impair efficiency in the performance of duty.

9. Decided indications of liability to pulmonary disease.

10. Permanent inefficiency of either of the extremities.

11. Hernia.

12. Incurable sarcocele, hydrocele, fistula, stricture, or hemorrhoids.

13. Large varicose veins of lower limbs. Chronic ulcers.

14. Attention will also be paid to the stature of the candidate; and no one manifestly undersized for his age will be received into the Academy. In case of doubt about the physical condition of the candidate, any marked deviation from the usual standard of height will add materially to the consideration for rejection. Five feet will be the minimum height for the candidate.

15. The board will exercise a proper discretion in the application of the above conditions to each case, rejecting no candidate who is likely to be efficient in the service, and admitting no one who is likely to prove physically inefficient. No candidate rejected by the board will be allowed a re-examination.

VIII. If both these examinations result favorably, the candidate will receive an appointment as a midshipman, become an inmate of the Academy, and be allowed his actual and necessary traveling expenses from his residence to the Naval Academy, and be required to sign articles by which he will bind himself to serve in the United States Navy eight years (including his term of probation at the Naval Academy), unless sooner discharged. If on the contrary, he shall not pass both of these examinations, he will receive neither an appointment nor his traveling expenses; nor can he by law have the privilege of another examination for admission to the same class unless recommended by the Academic Board.

IX. When candidates shall have passed the required examinations and been admitted members of the Academy, they must immediately furnish themselves with the following articles, viz:

One parade suit	\$39 11
One fatigue suit	13 6
One flannel jacket.....	13 50
One pea jacket.....	23 50
One parade cap	4 40
One fatigue cap	1 50
Six white shirts.....	11 25
Six pairs socks.....	1 50
Four pairs drawers.....	3 15
Six handkerchiefs	2 25
One hair mattress	10 75

One straw mattress.....	\$1 58
One hair pillow.....	1 58
One pair blankets.....	4 25
One spread.....	1 30
Four sheets.....	3 52
Four pillow cases.....	1 20
Six towels.....	1 38
Two pairs shoes.....	6 25
One tooth-brush.....	31
One hair-brush.....	1 00
One whisk.....	31
One coarse comb.....	45
One fine comb.....	31
One mug.....	13
One requisition book.....	41
One laundry book.....	50
One pass book.....	50
Total.....	<u>\$149 77</u>

Room-mates will jointly procure, for their common use, one looking-glass, two wash-basins, one water-pail, one slop-bucket, and one broom. These articles may be obtained from the storekeeper of the Academy, of good quality, and at fair prices.

X. Each cadet-midshipman must, on admission, deposit with the paymaster the sum of \$100, for which he will be credited on the books of that officer, to be expended, by direction of the Superintendent, for the purchase of text-books and other authorized articles besides those enumerated in the preceding article.

XI. A cadet-midshipman found deficient at any examination cannot, by law, be continued at the Academy or in the service, unless upon the recommendation of the Academic Board, and it will be useless to apply to the Secretary of the Navy, who will decline to interfere in the matter.

XII. A cadet-midshipman who voluntarily resigns his appointment within a year of the time of his admission to the Academy will be required to refund the amount paid him for traveling expenses.

GEO. M. ROBESON,
Secretary of the Navy.

ADDENDA.

The foregoing list of prices is published for the information of parents and guardians, who are not supposed to know the requirements of the Naval Academy. As these articles are of uniform pattern, it is recommended that they be purchased from the paymaster in charge of stores at the Academy, and a deposit of the amount made at the time of the admission of the candidate. *Underclothes* from home will do.

When candidates are admitted in June they will be at once sent on board ship, and will not be permitted to return again to their homes during that year.

The deposit for clothing, and the entrance deposit of \$100 in addition, must be made before the candidate can be received into the Academy.

For the further information of candidates for admission into the Naval Academy, it must be understood that they will be required to pass so thorough an examination in the studies prescribed in Paragraph VI that they shall prove, in that examination, their ability to proceed at once to the higher branches. They will, however, be at all times, during the academic year, subject to examination in the elementary branches.

GEO. M. ROBESON.

GENERAL CHARACTER

OF THE

QUESTIONS PROPOSED AT THE EXAMINATION OF CANDIDATES

FOR ADMISSION INTO

THE U. S. NAVAL ACADEMY AS CADET-MIDSHIPMEN.

- 1 Convert Arabic into Roman notation.
- 2 Convert Roman into Arabic notation.
- 3 Express in figures any dictated number of quadrillions, &c., down to units.
- 4 Explain the nature of vulgar and decimal fractions.
- 5 Multiply and divide decimal fractions.
- 6 Add and subtract, multiply and divide, any denominate numbers.
- 7 Find the greatest common divisor.
- 8 Find the least common multiple.
- 9 Add any vulgar fractions, or mixed numbers, and explain the method.
- 10 Subtract the same, as above.
- 11 Multiply any vulgar fractions, or mixed numbers, and explain.
- 12 Divide, as above.
- 13 Reduce to the simplest form any group of vulgar fractions and mixed numbers connected by the signs $+$, $-$, \times , and \div .
- 14 Divide by means of prime factors of the divisor, and explain the derivation of the final remainder.
- 15 Reduce vulgar fractions to decimals, and decimals to vulgar fractions.
- 16 Explain the nature of ratio, and of proportion.

Examples to be solved under all the above heads ; and questions answered orally if required.
 Questions to be answered first in writing ; if that is not decisive, an oral examination added.

ENGLISH BRANCHES.

Grammar.—Definitions of the parts of speech, and the rules connected therewith, as example : those relating to number, gender, person, and case ; inflection of nouns, pronouns and verbs ; definition of case, and how each is used ; classification and comparison of adjectives ; the divisions, and the definition of each division of pronouns ; classification of verbs with the definition of each class ; definition of regular and irregular verbs, with examples ; definitions of the several moods and tenses, and formation of the latter ; parsing words etymologically.

Geography.—The grand and political divisions, with the capitals of the latter ; the oceans, seas, gulfs, and bays ; chief mountains and views ; chief lakes, important straits and channels separating countries and islands ; principal islands, and to what nations they belong ; population of some of the largest and most important cities of the old and new worlds ; show through what waters, and by what countries, a vessel would pass in making a voyage between any important seaports of the world.

Writing.—From dictation in a legible hand, and showing a fair knowledge of punctuation.
Spelling.—With correctness orally, and in writing. The candidate will also be required to write an original composition, or a letter of fifteen or twenty lines in the examination-room, showing a knowledge of the elementary construction of sentences.

OFFICERS AND CADET-MIDSHIPMEN

ATTACHED TO THE

S. GUNNERY PRACTICE SHIP "CONSTELLATION," AND PRACTICE SHIP OF THE
NAVAL ACADEMY.—SUMMER CRUISE, 1872.

SLOOP "CONSTELLATION."

Captain—William N. Jeffers, *Commanding*. *Lieutenant Commanders*—William R. Bridgman, Lewis Clark, Charles J. Train. *Lieutenants*—Wm. W. Reisinger, H. R. Wilson, Perkins, W. S. Cowles. *Ensign*—B. H. Buckingham. *Surgeon*—J. H. Tinkham. *Assistant Surgeon*—C. K. Yancey. *Paymaster*—M. B. Cushing. *Chaplain*—J. B. Van Meter. *Second Lieutenant Marines*—Wm. B. Slack. *Captain's Clerk*—C. M. McLeod. *Paymaster's Clerk*—J. R. Ross. *Boatswain*—H. Dickinson. *Gunner*—C. C. Neil. *Carpenter*—S. N. Hitehouse. *Sailmaker*—Thomas S. Gay.

FIRST CLASS OF CADET-MIDSHIPMEN.

J. Badger.	W. F. Halsey.	T. E. Muse.	T. Tyler.
W. Bean.	T. B. Howard.	R. F. Nicholson.	E. B. Underwood.
L. Case, jr.	A. M. Knight.	C. F. Putnam.	J. P. Underwood.
C. Cowles.	S. C. Lemly.	A. Reynolds.	T. E. W. Veeder.
W. Deering.	A. A. Michelson.	J. M. Robinson.	F. A. Wilner.
W. B. Diehl.	C. B. T. Moore.	W. H. Schuetze.	W. Winder.
Fowler.	H. Morrell.	M. A. Shufeldt.	L. Young.

SECOND CLASS.

Farnsworth.	E. J. Dorn.	W. A. Northcott.	W. E. Whitfield.
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THIRD CLASS.

H. Amsden.	R. M. Doyle.	H. J. Hunt.	J. A. Shearman.
E. Beatty.	F. F. Fletcher.	R. Hunt.	J. T. Smith.
D. Bostick.	E. H. Gaither.	A. E. Jardine.	G. Stoney.
Braunersreuther.	W. A. Glassford.	C. Laird.	R. H. Townley.
Brown.	W. H. Hallowell.	S. L. Lauferty.	N. R. Usher.
B. Caperton.	J. M. Helm.	J. S. Manley.	F. B. Vinton.
S. Carter.	H. M. Hodges.	W. C. McDowell.	H. C. White.
W. Coffin.	A. C. Hodgson.	W. C. Oliver.	C. M. Winslow.
S. Collins.	H. H. Hosley.	S. M. Peacock.	A. W. Wills.
A. Corbin.	A. L. Howe.	H. B. Reed.	M. L. Wood.
G. Cutler.	W. S. Hughes.	A. Sharp.	G. N. Worcester.
Daniels.			

FOURTH CLASS.

L. Chambers.	J. C. Gillmore.	R. T. Mulligan.	F. H. Sherman.
G. Chase.	E. C. Goss.	L. W. Piepmeyer.	B. Tappan.
W. Collamore.	C. A. Gove.	E. R. Poland.	W. L. Varnum.
B. Crittenden.	N. J. L. T. Halpine.	G. H. Reed.	E. E. Wise.
Ewing.	S. Jenkins.	L. K. Reynolds.	T. N. Wood.
W. Ford.	K. Katz.	J. H. Sears.	

Total, 100.

Sailed from her anchorage June 13; touched at Hampton Roads, Orient Point, L. I., Newport, R. I., New London, Conn.; cruising in Gardner's Bay, through Block Island and Vineyard Sounds; stopped at Vineyard Haven; touched again at Newport, R. I.; from thence sailed for the Chesapeake, and arrived at Annapolis Roads 29th September.

U. S. STEAMER "TALLAPOOSA."

 Lieutenant D. G. McRITCHIE, *Commanding*.

Touched at Annapolis on 22d of June, when the class of Cadet-Engineers were embarked for practical instruction, &c., &c.

Second Assistant Engineers JOHN C. KAER AND CHARLES H. MANNING were detailed and ordered to her as instructors.

CLASS OF CADET-ENGINEERS.

R. R. Leitch.	R. G. Denig.	C. Kleckner.	W. H. Tiffany.
H. F. Cleaver.	W. B. Boggs.	S. Potts.	B. H. Warren.
L. W. Wooster.	J. N. Cumming.	G. B. Ransom.	A. V. Zane.
J. K. Barton.	J. R. Edwards.	W. E. Schneider.	

Total, 15.

Sailed from Annapolis June 22d; touched at the navy yards at Norfolk, Philadelphia, Brooklyn, Charlestown, Portsmouth, N. H.; the Cadet-Engineers returning to the Academy on the 28th September.

CADET-ENGINEERS ON PROBATION AT THE NAVAL ACADEMY,

ARRANGED

IN ORDER OF MERIT IN THEIR RESPECTIVE CLASSES

AS DETERMINED AT THE

GENERAL EXAMINATION IN MAY, 1872,

TOGETHER WITH

THE CADET-ENGINEERS ADMITTED IN SEPTEMBER, 1872, FORMING THE
FOURTH CLASS OF 1872-'73.

NOTE.

Cadet-engineers whose names are marked thus (*) are the five most distinguished in their respective classes.

Those marked thus (†) were found deficient, but were allowed to continue in their classes on condition of passing at a re-examination.

Those marked thus (‡) were found deficient, and turned back, to re-commence the studies of their respective classes.

Those marked thus (§) were found deficient, and recommended for discharge.

FIRST CLASS.

Relative standing of the Cadet-Engineers in the several branches of study.

16 members.

Order of general merit.	Name.	State.	Date of admission.	Age at date of admission.		Mathematics.	Steam engineering.	French.	Demerits for the year.	Sea service.	
				Years.	Months.					Months.	Days.
1	R. R. Leitch.....	Maryland.....	October 1, 1871	21	8	1	2	2	8	3	6
2	H. T. Cleaver.....	Pennsylvania.....	October 1, 1871	19	4	2	3	6	24	3	6
3	L. W. Wooster.....	New Jersey.....	October 1, 1871	19	1	3	7	5	48	3	6
4	J. K. Barton.....	Pennsylvania.....	October 1, 1871	18	6	5	6	7	60	3	6
5	R. G. Denig.....	Ohio.....	October 1, 1871	21	4	4	8	11	126	3	6
6	W. B. Boggs.....	D. C.....	October 1, 1871	19	11	d11	5	3	14	3	6
7	J. N. Cumming.....	New Jersey.....	October 1, 1871	22	0	d14	14	14	70	3	6
8	J. R. Edwards.....	Pennsylvania.....	October 1, 1871	18	2	d7	10	9	42	3	6
9	C. Kleckner.....	Pennsylvania.....	October 1, 1871	18	7	d13	13	10	80	3	6
10	S. Potts.....	Pennsylvania.....	October 1, 1871	18	7	d8	1	13	10	3	6
11	G. B. Ransom.....	New York.....	October 1, 1871	20	3	d6	4	4	44	3	6
12	W. E. Schneider a	D. C.....	October 1, 1871	19	2					3	6
13	W. H. Tiffany.....	New Jersey.....	October 1, 1871	21	11	d10	12	12	50	3	6
14	B. H. Warren a	Massachusetts.....	October 1, 1871	21	7					3	6
15	A. V. Zane.....	Pennsylvania.....	October 1, 1871	21	1	d9	9	8	62	3	6
16	A. de Ruiz.....	Pennsylvania.....	October 1, 1871	18	5	d12	11	1	216	0	0

(a) Sick.

(d) Deficient.

SECOND CLASS.

Cadet Engineers arranged in order of merit as determined at their examination for appointment.

20 members.

Order of merit.	Name.	State.	Date of admission.	Age at date of admission.	
				Years.	Months.
1	Albert B. Willetts.....	Pennsylvania.....	October 1, 1872	21	6
2	George L. Drouillard.....	Ohio.....	October 1, 1872	20	5
3	Charles H. Frizell.....	Ohio.....	October 1, 1872	21	7
4	Frank H. Eldridge.....	Ohio.....	October 1, 1872	20	2
5	William C. Eaton.....	New York.....	October 1, 1872	21	7
6	William R. King.....	Maryland.....	October 1, 1872	19	9
7	Alfred B. Canaga.....	Ohio.....	October 1, 1872	21	9
8	Asa Mattice.....	New York.....	October 1, 1872	19	2
9	Edgar T. Warburton.....	Pennsylvania.....	October 1, 1872	17	3
10	William N. Little.....	Georgia.....	October 1, 1872	19	8
11	Edmund Roebling.....	New York.....	October 1, 1872	18	9
12	Frank J. Hoffman.....	Maryland.....	October 1, 1872	19	11
13	Edmund U. Loomis.....	Maryland.....	October 1, 1872	21	3
14	William E. Schermerhorn.....	New Jersey.....	October 1, 1872	20	0
15	Edwin C. Sornborger.....	New York.....	October 1, 1872	20	2
16	Leo Morgan.....	California.....	October 1, 1872	19	10
17	Edward D. Meredith.....	Virginia.....	October 1, 1872	20	3
18	William C. Jeffrey.....	Pennsylvania.....	Nov. 18, 1872	20	5
19	Alberto de Ruiz.....	Pennsylvania.....	October 1, 1872	19	5
20	Robert I. Reid.....	Pennsylvania.....	October 1, 1872	20	2

COURSE OF INSTRUCTION FOR CADET-ENGINEERS.

First Year—First Term.

Algebra, Geometry, French, Steam Engineering (practical and theoretical), Mechanical Drawing.

First Year—Second Term.

Analytical Geometry, Descriptive Geometry, Trigonometry, French, Steam Engineering (practical and theoretical), Mechanical Drawing.

Second Year—First Term.

Statics, Calculus (differential), Calculus (integral), Natural Philosophy (heat), Chemistry, French, Steam Engineering (practical and theoretical), Mechanical Drawing.

Second Year—Second Term.

Dynamics, Hydrostatics, Hydrodynamics, Natural Philosophy (electricity), Chemistry, French, Steam Engineering (practical and theoretical), Mechanical Drawing.

Practical exercises in infantry drill, fencing, &c., with cadet-midshipmen every day, except in the exercise of seamanship, when practical steam enginery will be substituted.

PROGRAMME OF STUDIES FOR CLASS OF CADET-ENGINEERS.

First Term : October 1 to February 1.

Three recitations daily, except Saturday, marked (1) (2) (3). (1) Between 8½ a. m. and 10½ a. m. (2) Between 10½ a. m. and 12½ p. m. (3) Between 2 p. m. and 4 p. m. Practical exercises in infantry drill, &c., with cadet-midshipmen, every day, except in the exercise of seamanship, when practical steam enginery will be substituted.

Semi-annual examination to be held between the 15th of January and the 15th of February. Annual examination commences on the 20th of May.

Department.	Recitations.	Subjects.
<i>Second Class—First year.</i>		
Mathematics.....	[M. T. W. Th. F.] (1).....	{ Algebra (Davies' University). Geometry (Davies' Legendre). Vannier's Method. Mechanical Drawing (Warren's Elements). Text from Bourne and King. Practical instruction.
French.....	[T. F.] (2).....	
Steam Enginery.....	[M. W.] (2) [Th. F.] (3).....	
	[T.] (3) [Th.] (2) [S.] (1).....	
	[M. W.] (3).....	

Second Term : February 1 to June 1.

Three recitations daily, except Saturday, marked (1) (2) (3). (1) Between 8½ a. m. and 10½ a. m., except Monday, when it will be between 9 a. m. and 11 a. m. (2) Between 10½ a. m. and 12½ p. m., except Monday, when it will be between 11 a. m. and 12.55 p. m. (3) Between 2 p. m. and 4 p. m. Practical exercises in infantry drill, &c., with cadet-midshipmen, every day, except in the exercise of seamanship, when practical steam enginery will be substituted.

Semi-annual examination to be held between the 15th of January and the 15th of February. Annual examination commences on the 20th of May.

Department.	Recitations.	Subjects.
<i>Second Class—First year.</i>		
Mathematics.....	[M. T. W. Th. F.] (1).....	{ Algebra (first hour). Trigonometry (first hour). Analytical Geometry (first hour). Descriptive Geometry (second hour). Pasquell's Grammar. Practical Instruction. Text from Bourne and King. Mechanical Drawing (Warren's Elements).
French.....	[M. W.] (2).....	
Steam Enginery.....	[M. Th.] (3) [S.] (1).....	
	[T. F.] (2).....	
	[T. W. F.] (3) [Th.] (2).....	

REGULATIONS

FOR THE

APPOINTMENT OF CADET-ENGINEERS IN THE NAVY.

I. In pursuance of the third and fourth sections of an act passed at the first session of the Thirty-eighth Congress, approved July 4, 1864, "*To authorize the Secretary of the Navy to provide for the education of naval constructors and engineers, and for other purposes,*" and of the second section of an act passed at the first session of the Thirty-ninth Congress, approved March 2, 1867, entitled "*An act to amend certain acts in relation to the Navy,*" applications will be received by the Navy Department for the appointment of cadet-engineers.

II. The application is to be addressed to the Secretary of the Navy, and can be made by the candidate, or by any person for him, and his name will be placed on the register. The registry of a name, however, gives no assurance of an appointment, and no preference will be given in the selection to priority of application.

III. The number of cadet-engineers is limited by law to fifty. The candidates must not be less than eighteen nor more than twenty-two years of age; he will be required to certify *on honor*, to his precise age, to the Academic Board, previous to his examination, and no one will be examined who is over or under the prescribed age. His application must be accompanied by satisfactory evidence of moral character and health, with information regarding date of birth and educational advantages hitherto enjoyed. Candidates who receive permission will present themselves to the Superintendent of the Naval Academy between the 15th and 25th of September, for examination as to their qualifications for admission.

IV. The course of study will comprise two academic years. All cadets who graduate will be warranted as assistant engineers in the Navy. The pay of a cadet-engineer is the same as that of a cadet-midshipman.

V. The academic examination previous to appointment will be on the following subjects, namely: *Arithmetic*; the candidate will be examined in numeration and the addition, subtraction, multiplication, and division of whole numbers, and of vulgar and decimal fractions; in reduction; in proportion or rule of three, direct and inverse; extraction of square and cube roots; in *Algebra* (Bourdon's), through equations of the first degree; in *Geometry* (Davies's Legendre), through the plane figures; *Rudimentary natural philosophy*; *Reading*; he must read clearly and intelligibly from any English narrative work, as, for example, Bancroft's History of the United States; in *writing* and *spelling*; he must write from dictation, in a legible hand, and spell with correctness, both orally and in writing; in *English grammar* and *English composition* he will be examined as to the parts of speech, the rules connected therewith, and the elementary construction of sentences, and will be required to write such original paragraphs as will show that he has a proper knowledge of the subject. The candidate will also be required to exhibit a fair degree of proficiency in pencil-sketching, and to produce satisfactory evidence of mechanical aptitude. Candidates who possess greatest skill and experience in the practical knowledge of machinery, other qualifications being equal, shall have precedence for admission.

VI. Any of the following conditions will be sufficient to reject a candidate:

Feeble constitution, permanently impaired general health, decided cachexia, all chronic diseases or results of injuries that would permanently impair efficiency, viz:

1. Infectious disorders.
2. Weak or disordered intellect.

3. Unnatural curvature of spine.
4. Epilepsy, or other convulsions, within five years.
5. Chronic impaired vision, or chronic disease of the organs of vision.
6. Great permanent hardness of hearing, or chronic disease of the ears.
7. Loss or decay of teeth to such an extent as to interfere with digestion and impair health.
8. Impediment of speech to such an extent as to impair efficiency in the performance of duty.
9. Decided indications of liability to pulmonary disease.
10. Permanent inefficiency of either of the extremities.
11. Hernia.
12. Incurable sarcocele, hydrocele, fistula, stricture, or hemorrhoids.
13. Large varicose veins of lower limbs. Chronic ulcers.
14. Attention will also be paid to the stature of the candidate, and no one *manifestly* undersized for his age will be received into the Academy. In case of doubt about the physical condition of the candidate, any marked deviation from the usual standard of height will add materially to the consideration for rejection.

15. The board will exercise a proper discretion in the application of the above conditions to each case, rejecting no candidate who is likely to be efficient in the service, and admitting no one who is likely to prove physically inefficient.

VII. If both these examinations result favorably, the candidate will receive an appointment as a cadet-engineer, become an inmate of the Academy, and will be allowed his actual and necessary traveling expenses from his residence to the Naval Academy, and be required to sign articles by which he will bind himself to serve in the United States Navy six years (including his term of probation at the Naval Academy), unless sooner discharged. If, on the contrary, he shall not pass both of these examinations, he will receive neither an appointment nor his traveling expenses, nor can he have the privilege of another examination for admission to the same class unless recommended by the board of examiners.

VIII. When candidates shall have passed the required examinations and been admitted as members of the Academy, they must immediately furnish themselves with the following articles, viz:

One navy-blue uniform suit.....	\$39 16
One fatigue suit	13 67
One navy-blue uniform cap.....	4 46
One uniform overcoat.....	23 55
Six white shirts.....	11 28
Six pairs of socks.....	1 56
Four pairs of drawers.....	3 12
Six pocket handkerchiefs.....	2 28
One hair mattress.....	10 71
One pillow.....	1 58
One pair of blankets.....	4 25
One bed cover or spread.....	1 30
Two pairs of sheets.....	3 52
Four pillow cases.....	1 20
Six towels.....	1 38
Two pairs of shoes or boots.....	6 25
One hair-brush.....	1 00
One tooth-brush.....	31
One clothes-brush.....	31
One coarse comb for the hair.....	45
One fine comb for the hair.....	31
One tumbler or mug.....	13
One fatigue cap.....	1 50
One straw mattress.....	1 58

One requisition book	\$0 50
One laundry book	50
One pass book	50
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Total	\$149 77
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Room-mates will jointly procure, for their common use, one looking-glass, one wash-basin, one water-pail, one slop-bucket, and one broom. These articles may be obtained from the store-keeper of the Academy, of good quality, and at fair prices.

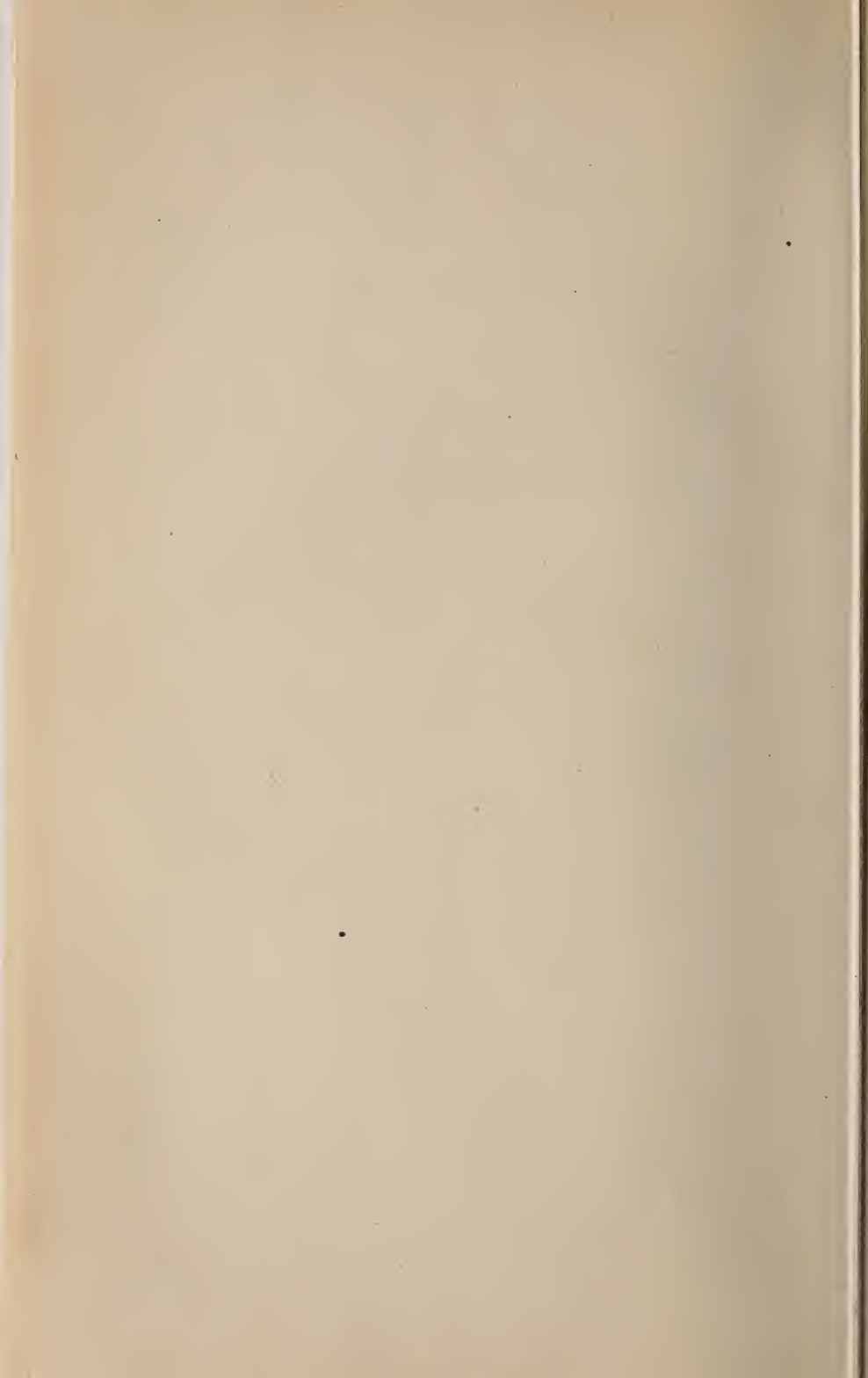
IX. Each cadet-engineer must, on admission, deposit with the paymaster the sum of \$75, for which he will be credited on the books of that officer, to be expended, by direction of the Superintendent, for the purchase of text-books and other authorized articles besides those enumerated in the preceding article.

X. While at the Academy the cadets will be examined, from time to time, according to the regulations prescribed by the Navy Department; and if found deficient at any examination, or dismissed for misconduct, they cannot, by law, be continued in the Academy or naval service, except upon recommendation of the Academic Board.

XI. A cadet-engineer who voluntarily resigns his appointment will be required to refund the amount paid him for traveling expenses.

GEO. M. ROBESON,
Secretary of the Navy.

NAVY DEPARTMENT, *April 4, 1871.*



RESIGNATIONS, DISMISSALS, ETC.,

FROM

OCTOBER 1, 1871, TO SEPTEMBER 30, 1872. INCLUSIVE.

RESIGNATIONS.

Cadet-Midshipman Irving R. Fisher.....	Oct. 13, 1871.
Cadet-Midshipman Eustace C. Elder.....	Oct. 13, 1871.
Cadet-Midshipman Frederick Tyler.....	Oct. 23, 1871.
Cadet-Midshipman Willie W. Hunt.....	Oct. 23, 1871.
Cadet-Midshipman John W. Turnbull.....	Nov. 9, 1871.
Cadet-Midshipman Henry O. DuBois.....	Nov. 14, 1871.
Cadet-Midshipman Henry F. Wells.....	Nov. 20, 1871.
Cadet-Midshipman Eugene Raines.....	Dec. 13, 1871.
Cadet-Midshipman George S. Arnold.....	Dec. 21, 1871.
Cadet-Midshipman Frank A. White.....	Dec. 20, 1871.
Cadet-Midshipman Samuel M. Mears.....	Dec. 2, 1871.
Cadet-Midshipman Samuel M. Watkins.....	Feb. 21, 1872.
Cadet-Midshipman Harry A. Slaughter.....	Mar. 5, 1872.
Cadet-Midshipman George B. Way.....	May 3, 1872.
Cadet-Midshipman Clare Boulton.....	May 13, 1872.
Cadet-Midshipman Frank Johns.....	May 31, 1872.
Cadet-Midshipman Otho H. W. Ragan.....	June 5, 1872.
Cadet-Midshipman James V. Turner.....	June 6, 1872.
Cadet-Midshipman Charles Hull.....	June 6, 1872.
Cadet-Midshipman Eben B. Crocker.....	June 8, 1872.
Cadet-Midshipman Alfred L. Hall.....	June 8, 1872.
Cadet-Midshipman Mendle P. Blakesley.....	June 8, 1872.
Cadet-Midshipman Samuel G. Brent.....	June 8, 1872.
Cadet-Midshipman Robert D. Digges.....	June 8, 1872.
Cadet-Midshipman Shubael A. Dyer.....	June 8, 1872.
Cadet-Midshipman Hermann F. Grabo.....	June 8, 1872.
Cadet-Midshipman Charles Hayward.....	June 8, 1872.
Cadet-Midshipman Joseph S. Strader.....	June 8, 1872.
Cadet-Midshipman Thomas H. S. Hamersley.....	June 11, 1872.
Cadet-Midshipman Edward W. Hicks.....	June 11, 1872.
Cadet-Midshipman Frederick A. Lathrop.....	June 11, 1872.
Cadet-Midshipman Robert E. Lewis.....	June 11, 1872.
Cadet-Midshipman Frank C. McCoy.....	June 11, 1872.
Cadet-Midshipman George K. McGunnigle.....	June 11, 1872.
Cadet-Midshipman Cyrus H. Thompson.....	June 11, 1872.
Cadet-Midshipman Edward A. Whipple.....	June 11, 1872.
Cadet-Midshipman Silven Hughes.....	June 11, 1872.
Cadet-Midshipman Eben S. Osborne.....	June 11, 1872.
Cadet-Midshipman Stephen Y. Seyburn.....	June 11, 1872.
Cadet-Midshipman Stephen Decatur.....	June 15, 1872.
Cadet-Engineer Alberte de Ruiz.....	June 8, 1872.

WITHDRAWN.

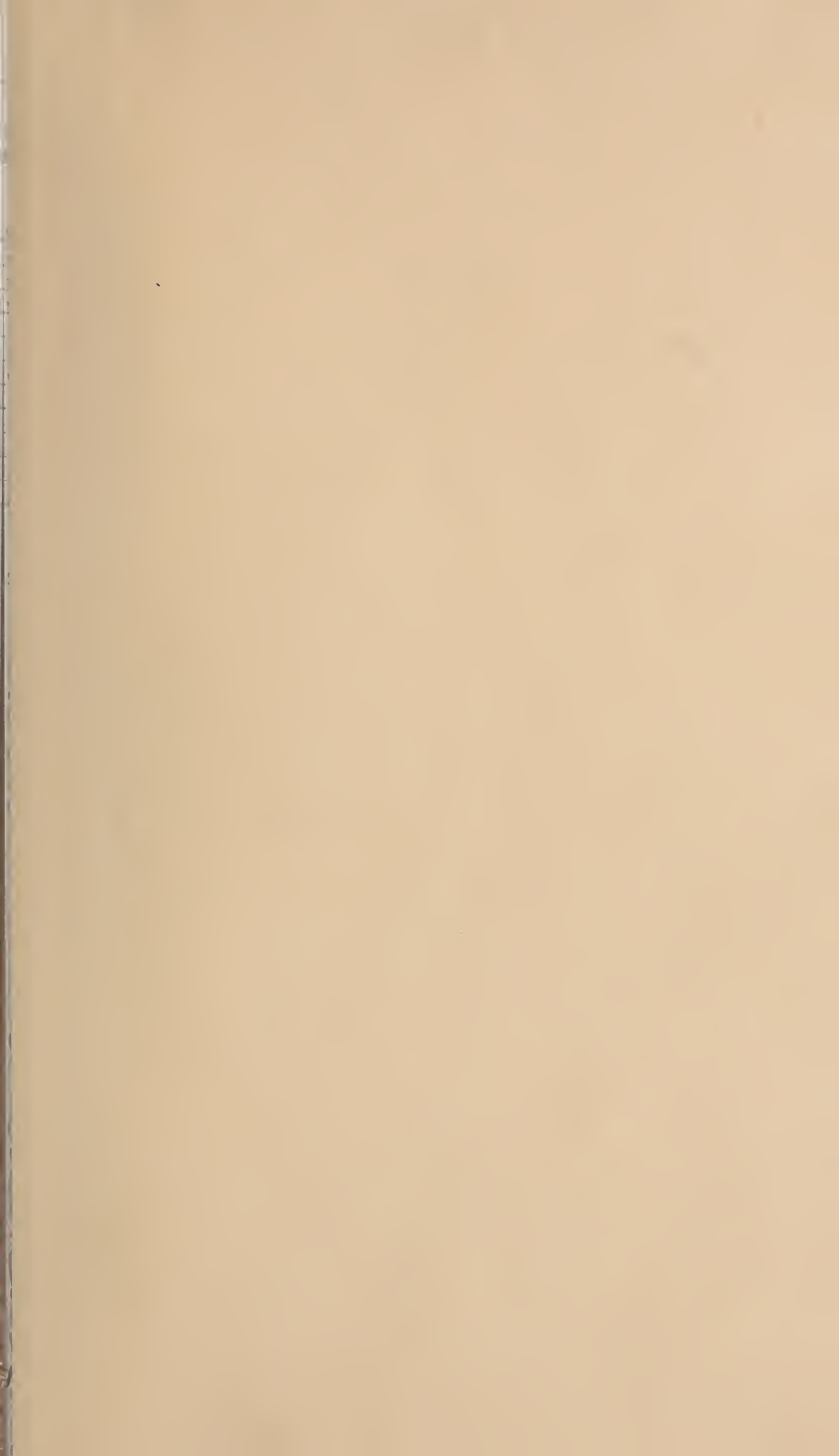
Japanese Student Ise Sataro.....	Oct. 24, 1871
Cadet-Midshipman Frank C. Chapman	June 19, 1872

DISMISSALS, ETC.

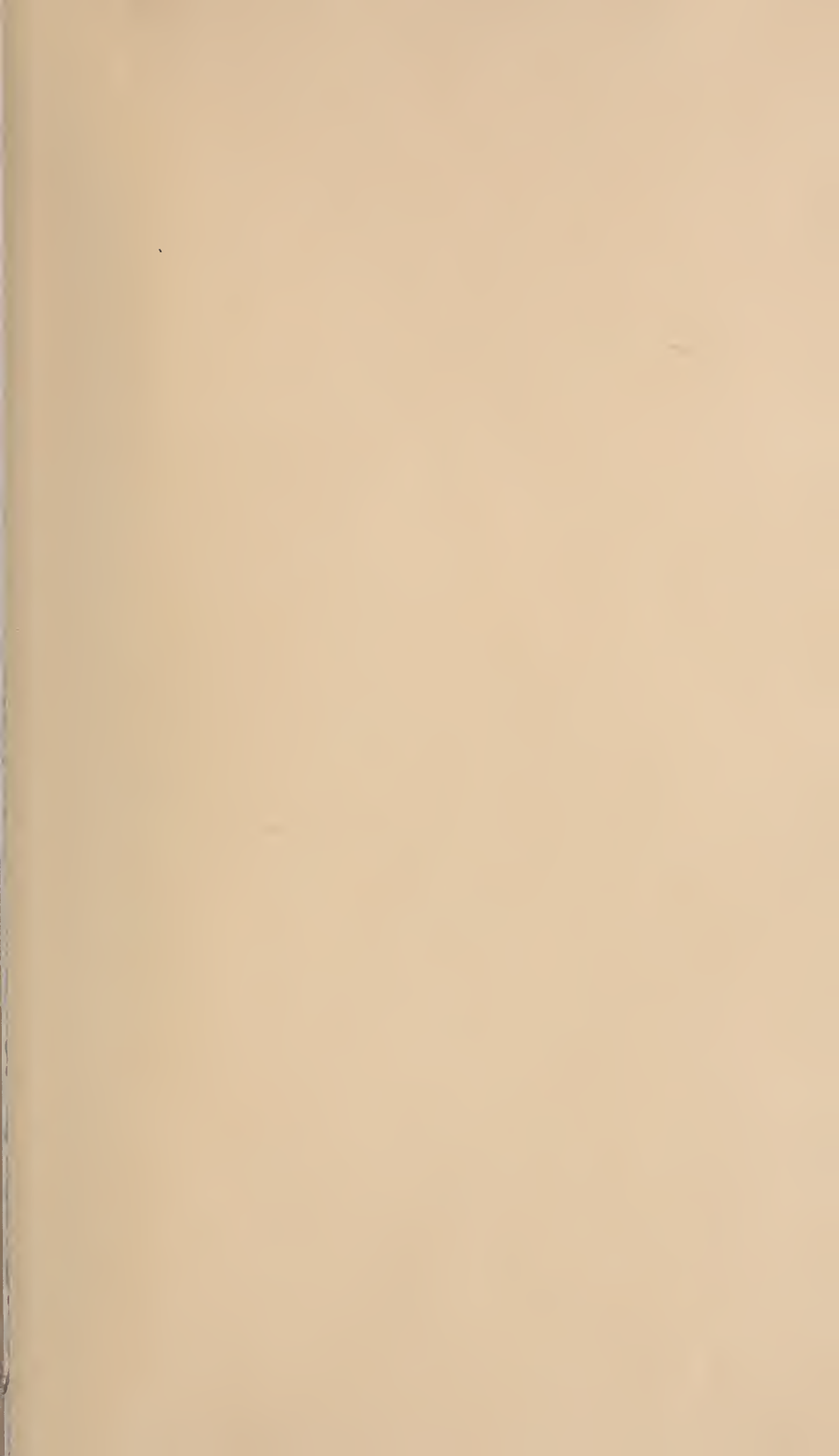
Cadet-Midshipman Frank A. Penn, dropped.....	Oct. 14, 1871
Cadet-Midshipman Clifford J. Boush, dropped.....	Oct. 14, 1871
Cadet-Midshipman Charles M. Canon, dropped.....	Oct. 14, 1871
Cadet-Midshipman Corydon F. Craig, dropped	Oct. 14, 1871
Cadet-Midshipman Henry P. Moorman, dropped.....	Oct. 14, 1871
Cadet-Midshipman James W. Blakely, dropped.....	Nov. 16, 1871
Cadet-Midshipman William T. Dutton, dropped	Nov. 16, 1871
Cadet-Midshipman William G. Harrington, dropped.....	Nov. 16, 1871
Cadet-Midshipman William S. McGinnis, dropped.....	Nov. 16, 1871
Cadet-Midshipman John C. Nichols, dropped.....	Nov. 16, 1871
Cadet-Midshipman John C. Thomas, dropped.....	Nov. 16, 1871
Cadet-Midshipman Thomas C. Whitehead, dropped	Feb. 21, 1872

APPOINTMENT REVOKED.

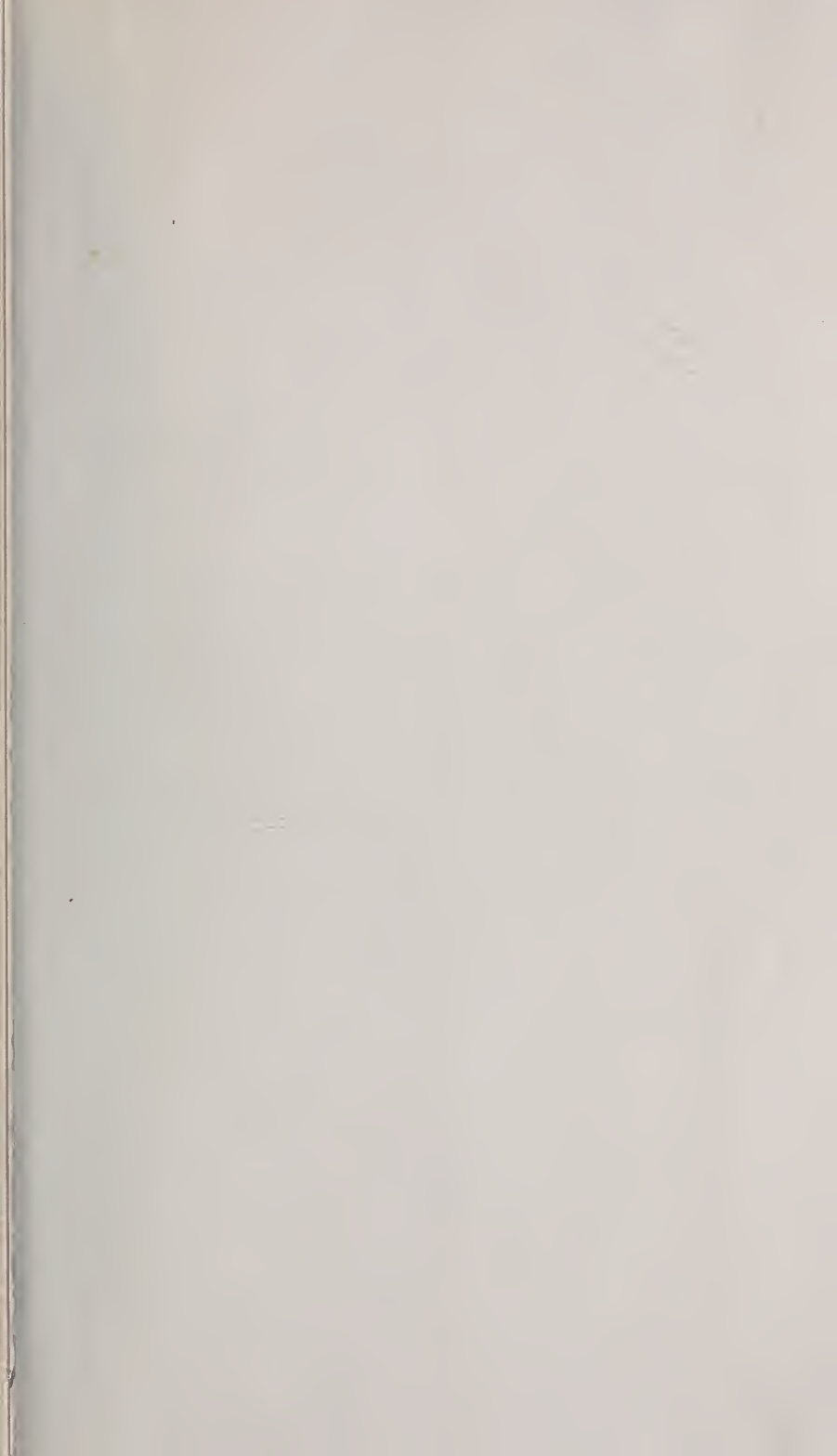
Cadet-Midshipman William L. Chipman	July 8, 1872
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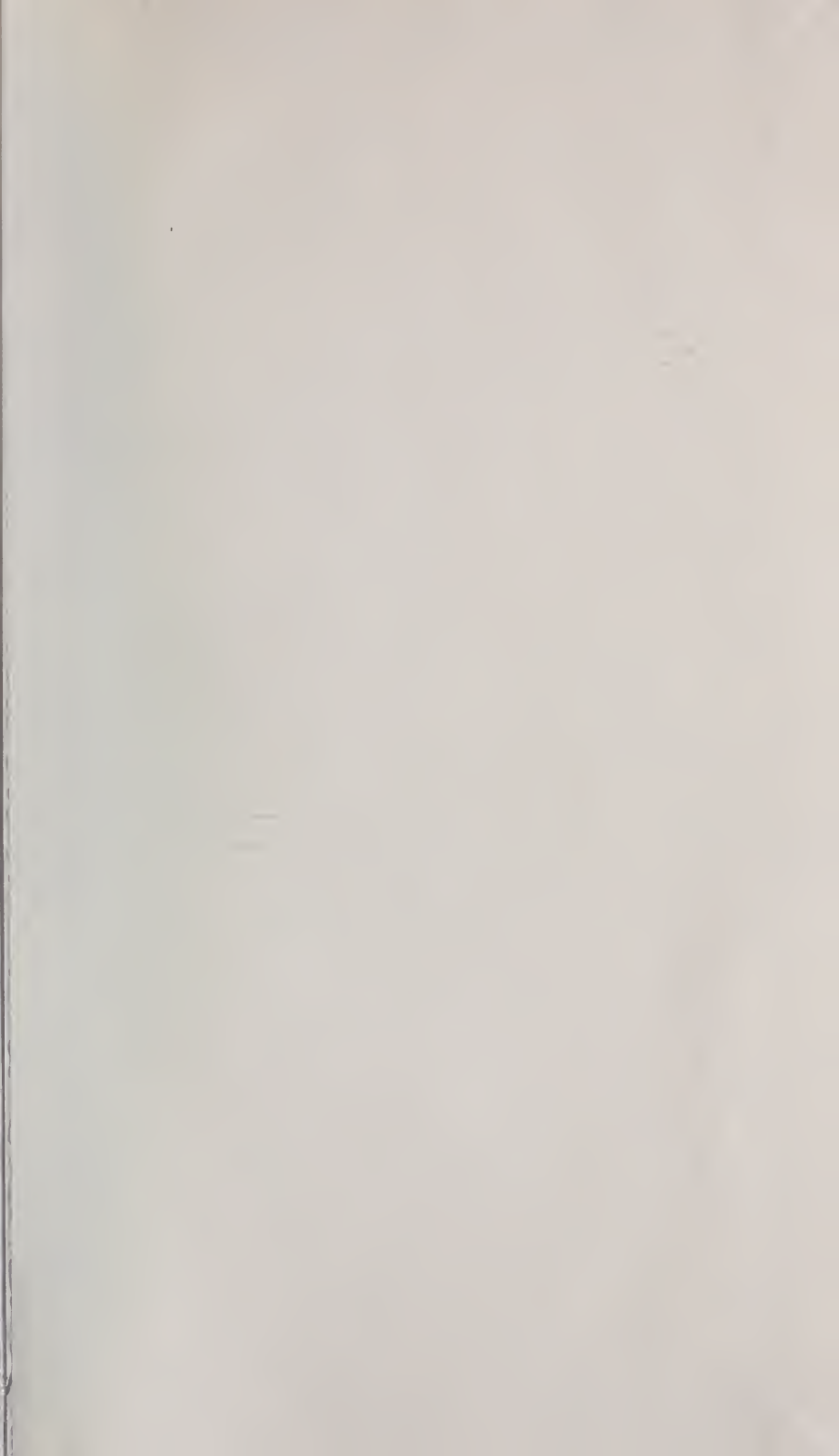














Annual register

1872-1873

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